JCATI 2025-26 Request for Proposals

Due Date: Friday, February 28, 2025, 5 PM PST

General Information

The Joint Center for Aerospace Technology Innovation (JCATI) is a Washington State (WA) aerospace industry economic development program funded by the legislature. Our goal is the transition of new technologies to WA aerospace companies of all sizes. **JCATI project award funds pay for short term industry access to WA public university engineering expertise.** Preferred industry projects are Technology Readiness Level (TRL) 4-7 ("Valley of Death").

How JCATI works:

- A WA aerospace company identifies a technical pain point and finds appropriate expertise in a WA public university School or College of Engineering.
- Engineering faculty submit a JCATI project application on behalf of the industry partner describing how their expertise can solve the issue.
- If selected, faculty receive funding to primarily support WA engineering students working on the technology solution.
- Industry partner provides project in-kind support necessary for project completion. Successful projects are well scoped and have a clear technology transition plan

JCATI funds are not meant to be long-term grants, industry sponsored research, or basic research support. JCATI projects are not capstones but projects with real industry deliverables.

Interested industry partners can contact WA public university engineering faculty directly or can ask the JCATI Program Manager to help identify potential academic partners. **If an industry partner requires matchmaking help,** contact the Program Manager no later than January 17, 2025.

The JCATI program is committed to diversity, equity, and inclusion for all project participants. We envision JCATI projects as opportunities to become part of the aerospace field regardless of gender identity, race, and ethnicity. A diverse aerospace workforce enhances collaboration and the creation of new ideas for the aerospace industry, our universities, and Washington State.

RFP virtual office hours: February 6, 2025, 3-4 pm. No meeting agenda, just a Zoom session to ask RFP related questions. Registration required.

We **strongly encourage** applicants to review the Best Practices PowerPoint during proposal development. Application cover sheet, budget form, FAQ, Best Practices presentation, and application checklist can be found on the JCATI funding page.

Please note: 2025-26 project funding levels depend on the 2025 WA legislature approved budget. The JCATI review committee will select potential projects in May but cannot finalize award amounts until our budget allocation is known. Due to session length, this may not be until June. Be aware you may need to start your project using a guarantee account or other budget.

Program Contact: Beth Hacker, JCATI Program Manager, bhacker@uw.edu.

Award Information

- Estimated number of awards for 2025-26: 12-15
- Maximum budget request: $120,000 ($115,000 for project + optional $5000 for Undergraduate Scholars Program)
- Project award period is 1 year: July 1, 2025, to June 30, 2026.
- All JCATI funds must be spent by June 30, 2026. No cost extensions are not allowed. Any unspent funds are returned to the state via the UW.
- JCATI award funds are not subject to university indirect rates (F&A).
- Awardees and their students are required to present projects at the April 2026 JCATI symposium in Spokane (date TBD).
- A final report including information from both academic and industry partners is due by July 17, 2026.

Eligibility Requirements:

- Applicant Organization: Eligible applicant organizations are Central Washington University, Eastern Washington University, Evergreen State College, University of Washington, Washington State University and Western Washington University.
- Principal Investigator**:** The principal investigator (PI) and all co-investigators must be employed by the applicant organization's College or School of Engineering. Principal investigators must meet their employer's requirements for such status.
- Industry Partners: **The primary aerospace industry partner must have a WA presence. The majority of project work and project impact must occur in WA.** Organizations outside WA may be permissible if the above conditions are met. JCATI is funded by WA taxpayers and as such, we must benefit our residents. Please contact the JCATI Program Manager if you have questions.
- JCATI funds only one proposal per PI

- For UW Applicants Only:

    - JCATI applications do not require an eGC1. Do not submit applications to OSP!
    - UW does not allow postdocs to be PIs.
    - Applied Physics Laboratory (APL) researchers and staff are ineligible to apply.

- For WSU Applicants Only:
    - WSU graduate students listed on JCATI projects may receive tuition waivers with an approved commitment from the Graduate School **if** a request was submitted by a student's home department at the proposal stage.

Management and Ownership of Intellectual Property

- JCATI funded projects have successfully transitioned technology to aerospace businesses of all sizes. Each academic institution has intellectual property mechanisms in place including UW and WSU licensing options. We **strongly advise** you and your industry partner discuss your project with the appropriate contact below:
    - Central Washington University: Greg Lyman (glyman@cwu.edu) Chair, Department of Engineering Technologies, Safety and Construction
    - Eastern Washington University: Jason Durfee (jdurfee@ewu.edu) Chair, Department of Mechanical Engineering & Technology
    - The Evergreen State College: John Caraher (caraherj@evergreen.edu) Academic Dean of Faculty
    - University of Washington: Erin Schwartz (erinlisa@uw.edu) Senior Director, Corporate & Foundation Relations
    - Washington State University: Brian Kraft (bkraft@wsu.edu) Assistant VP, Office of Research Advancement & Partnerships
    - Western Washington University: David Patrick (david.patrick@wwu.edu) Interim Vice Provost for Research
- Proposal information is not released without both academic and industry partner permission.

Types of Supported Projects

- **Projects must be WA State aerospace industry related with impact occurring in WA**

JCATI interprets aerospace broadly and relevant areas include but are not limited to:
AI/machine learning, advanced air mobility, aerospace materials, aerospace propulsion, aerospace sustainability, aircraft configuration design, aircraft or spacecraft power systems, airport transportation modernization, communications systems, controls and autonomy, human-machine interfaces, manufacturing and production innovation, safety technology or diagnostic tools for passengers and/or aerospace workers, software, space, UAV systems.

- Selection preference is for projects with a high probability of technology transitioning to the industry partner within 1 year, preferably sooner. JCATI funding is not appropriate for basic research or long-term projects.
- Industry partners must provide project support (cash and/or in-kind) which can include materials, consulting time, machinery access, computing time, testing facilities, etc. Applications must

include an industry letter documenting the technology need and support amount. Industry partners are encouraged to find ways to involve students in the technology transition. At project conclusion, the industry partner provides a summary letter documenting support amount and technology transition back to the company. Failure to provide the letter or communicate the transition may affect future project funding.

- The academic partner uses JCATI funds for student salaries, equipment, laboratory fees, materials, etc. All expenditures must follow fiscal best practices set by their institution.

Narrative Pre-review Opportunity

JCATI will provide an **optional** pre-proposal narrative review focusing on grantsmanship and RFP structural aspects but not the project's science, scope, budget, or fundability. Note this pre-review is separate from full proposal review and scoring. Comments are non-binding. Each applicant can submit only one draft narrative for pre-review. Do not include project budget, industry letters, or cover page.

Upload your draft PDF narrative into this Google form until Friday, January 17, 2025. Only pre-proposals submitted this way will be considered. You will receive brief feedback related to meeting the RFP intent.

JCATI Proposal Preparation and Submission Instructions

- Use Arial 10-point font size and 1" margins. Figure captions can use smaller font size.
- Application size limit=4 MB
- Applicants must include disclosures of any financial or tech transfer interests held in industry partners.
- Failure to follow instructions will result in penalties, including returning without review
- UW Aero & Astro applicants: project budget must be completed and signed off by A&A grant staff no later than 5 PM Friday, February 21, 2025.

Submit the full application no later than Friday, February 28, 2025, at 5:00 PM (PST). Upload your application PDF using the large "Submit Applications Here" button on the JCATI funding page. **Only proposals submitted via the JCATI website will be accepted**. Do not send your proposal to the JCATI Program Manager. Submissions are time stamped upon receipt and late proposals will not be reviewed. The JCATI Program Manager confirms application receipt.

The JCATI proposal includes the following elements in order:

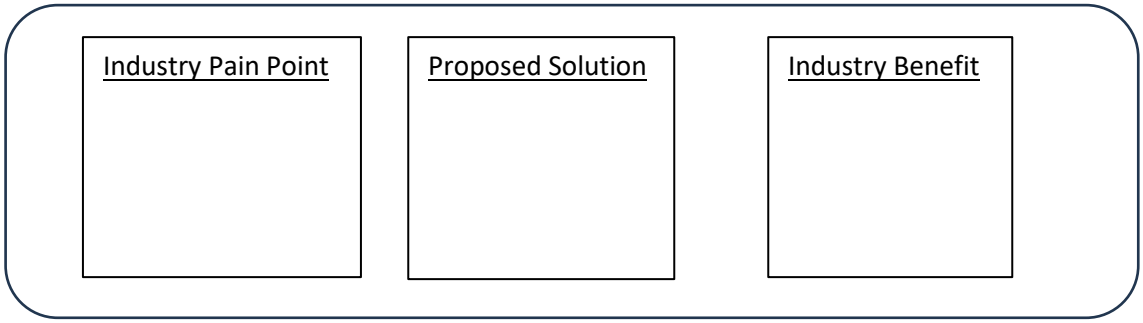
I. Application Cover Sheet

Complete the 2025 Cover Sheet found on the JCATI funding page under Application Forms.

II. Non-Technical Abstract and Project Diagram (1-page total for abstract and diagram, 150-word limit for abstract)

Abstract: In 150 words or less, state the overall project objective(s), deliverable(s) and impact in accordance with JCATI's purpose.

Diagram: on the same page under the abstract, include a figure using the format below. The boxes can contain text, graphics, and/or figures to describing project goals.



III. Narrative (5 single-spaced pages total for sections A-C)

Provide sufficient technical information for reviewers to evaluate the scientific merit and benefit to WA aerospace industry independent of any other document. All figures are included within the page limit. Note references are listed separately in Section IV. **Include the following sections in order, each with the section title.**

A. Technical Merit and Project Feasibility (2 pages total for sections A.1-A.2)

A.1. Technical Background and Approach

Clearly present your industry partner's technology pain point and how your scientific expertise addresses the problem. Explain how the proposed solution impacts the industry partner's production processes and/or market. If the project is a continuation from a previous year, explain why more JCATI funding is necessary. **Include the current TRL level and why it was chosen.** Use the TRL guide on the funding page. Preferred projects are TRL 4-7 technology issues.

A.2. Objectives, Outcomes, Deliverables

Clearly list specific technical project objectives and deliverables needed to address the pain point. State how you will solve your industry partner's technology problem in the 1-year JCATI funding period.

NOTE: limit of 2 pages total for sections A.1.-A.2. Make sure to explain why this JCATI project is important for your industry partner and why you are the one to solve it!

B. Industry Partnership and Transition Plan

B.1. Industry Partner In-kind Support

State the type and cash equivalent value of industry project in-kind support. Support can be cash, materials, consulting time, computing time, machining time, etc. Note: industry partners will verify delivered support at project period end.

B.2. Partners and Roles

Describe both the academic and industry partner's contributions designed to support and transition project success. Include the name(s) of the industry lead(s).

B.3. Technology Transition Plan

Provide a project plan and/or timeline describing project milestones, academic partner exit, and project technology hand off to your industry partner. How will the deliverables in Section A.2. move from your academic lab back to the industry partner within 1 year of JCATI funding ending (ideally much sooner)?

C. WA Economic and Educational Impact

C.1. Business Opportunities and Job Benefits

Describe how solving the pain point impacts your industry partner. Include any measurable job creation metrics or fiscal benefits resulting from the technology. Is there a near term WA business opportunity the technology opens or improves?

C.2. Educational, Internship and Job Opportunities

Describe how WA engineering students benefit from project participation. This can be through internships, job opportunities, mentoring, soft skills development, networking, community or student outreach, etc.

OPTIONAL Section D: Undergraduate Scholars Program (1-page limit, $5000 max)

The Undergraduate Scholars Program (USP) supports meaningful undergraduate student research opportunities. Student participation can be for a defined period (summer, part of academic year) or over the entire project. JCATI encourages inclusion of students from historically underrepresented groups.

If applying for USP funds, provide the following information:

- Describe your recruitment and selection of USP students.
- Describe the project role USP students will have and how USP funds will be used.

IV. References and Optional Reviewer Suggestions (1-page total limit)

1. References-List all references from Sections A-C here.
2. Optional Reviewer Suggestions: Provide reviewer names and contact information. Please check they are willing to serve as a reviewer and do not have a conflict of interest.

V. Industry Letters of Support

Each industry partner provides a letter of support (LOS) outlining their project support and involvement. At project end, industry partners must verify the delivered support amount. LOS should include the following:

- Name of industry contact and project role
- Type of in-kind support and its cash equivalent value. Support may be in the form of, but not limited to cash, materials, facility access, testing services, consulting time, student internships.
- Brief description of how technology will be transitioned back into the company for use.
- If applicable, brief description of milestones or decision points for support distribution.

VI. Biosketch (2-page limit each for PI/Co-PI)

Maximum 2 pages each for PI/Co-PI. Create an abbreviated biosketch using only the following NSF sections:

- Professional preparation: undergraduate and graduate education, postdoctoral training
- Appointments: in reverse chronological order list academic or professional for the last 10 years
- Products: up to 5 products related to expertise required for the JCATI project. Products can include publications, patents, data sets, software, startups, etc.

VII. Budget Form and Justification

- Maximum budget request: $120,000: $115,000 max for project plus optional $5000 for Undergraduate Scholars Program (if the PI completed the optional Narrative Section D).
- Complete the budget form on the JCATI funding page. Include a budget justification briefly describing charges under each heading. The budget form must be signed by both the PI and departmental grants staff.
- JCATI award funds are not subject to Facilities and Administrative costs (indirects/overhead).
- Each project has only one PI and one budget number/worktag. Student and postdoc FTE cannot be split between JCATI funded projects.
- JCATI projects do not allow carry forward. Budget deficits must be resolved by the project period end. All unspent award funds must be returned to the state through the UW.

- A. Senior personnel:
  - Faculty can draw FTE from only one JCATI project. If a funded PI has FTE on a different JCATI funded project, the PI must choose which project to draw salary from.
  - Total tenure track faculty FTE is limited to 1.0-month summer salary. Research faculty may request up to 3 months' salary.

- B. Other Personnel:
    - UW graduate students listed on JCATI projects receive tuition waivers except for UW Mechanical Engineering Master's students taking PCE courses. PCE does not waive tuition for students on JCATI projects. If one of your UW ME students is in this program, you must budget for their tuition.
    - WSU projects: WSU graduate students listed on JCATI projects may receive tuition waivers with an approved commitment from the Graduate School **IF** a request was submitted by a student's home department at the proposal stage. The waivers are not automatic, and timing is important for proper processing.
- C. Fringe Benefits
    - Use the appropriate benefits load rates for project personnel.
- D. Equipment:
    - Include quotes for any equipment over $5000 and a budget justification description on why the equipment is needed.
    - JCATI funds cannot be used for foreign transactions.
    - All project purchases must follow the procurement rules set by their institution.
- E. Travel:
    - JCATI funds are limited to US travel. Foreign travel is not allowed.
    - Funds are meant for travel to industry partner facilities (meetings, onsite testing, etc.)
    - The 2026 symposium will be in Spokane (date TBD). The PI should include $750 for their own symposium travel and lodging. JCATI pays for student symposium travel/lodging costs.
- F. Other Direct Costs
    - Include costs for materials, supplies, fabrication and other project services.
- G. USP Funds (optional)
    - If you completed optional Section D, you may request up to $5000 additional funds. If the project is funded, work with your grant manager on undergraduate hiring details.

Proposal submission

Upload your application PDF using the large "Submit Applications Here" button found on the JCATI funding page. Submissions are time stamped upon receipt and late proposals will not be reviewed.

DO:

- Complete the proposal cover sheet with appropriate signatures.
- Assemble sections in order into one PDF for upload. Double check you have the correct version.
- Are you under the 4 MB file size limit?
- Determine who submits the proposal: you? Grant manager? Student?
- Use the RFP checklist to make sure you haven't forgotten anything.

DON'T:

- Wait until the last minute. Proposals are time stamped upon receipt in the system, not when you submit them! There always is a lag time!

- Email your proposal to the Program Manager. Only proposals submitted via the JCATI website are reviewed.
- Ask the Program Manager if everything looks ok. We don't provide proposal input or notify applicants of missing sections or errors.

NOTE: The JCATI website creates an automated email acknowledging proposal submission. Additionally, the Program Manager verifies application receipt.

Proposal Review Process

- JCATI proposal reviewers are subject matter experts who sign confidentiality agreements to ensure proprietary proposal information is undisclosed.
- The JCATI Board of Directors discuss reviewer scores and comments as a part of their final project selection process.
- Proprietary information is kept confidential. When award selections are announced and JCATI funds committed, project name and PI are listed on the JCATI website. Further project information is not made public unless authorized.

Award Terms and Conditions

- Award decisions cannot be appealed. No award is final until a grant agreement has been executed. The applicant's academic institution is legally responsible for authorizing and submitting proposals, administering the grant, and disbursing JCATI funding.
- Awards that are funded via JCATI funding are subject to the same regulatory requirements as other sponsored programs. PIs should work with their academic institutions to ensure compliance with applicable requirements, including those related to conflicts of interest and disclosures, data privacy and security, environmental health and safety, export controls, and facility use.
- If the award differs from the amount requested, the JCATI Program Manager will request a revised budget and project scope before funds are awarded. Effort reduction greater than 25% needs JCATI Program Manager approval.
- The PI is responsible for leading the proposed work, managing the budget, attending the symposium along with their students and reporting progress. The industry partner is responsible for delivering in-kind support, collaborating with the PI, and transitioning the technology back into the company.
- PI must get approval from JCATI Program Manager to spend their award funds other than as outlined in their budget/budget justification.
- If the PI changes academic institutions, JCATI funds cannot be transferred outside WA or to a private WA institution.
- JCATI requires a final report with information on technology transition progress, student involvement, and industry partner's delivered in-kind contribution. Report data is used for

mandatory reporting to the WA legislature. Failure to deliver support or provide required information may affect future funding. JCATI continues to follow up with the PI for updates tied to legislative reporting.

- PIs should work with their fiscal team to spend all award funds. Any unspent research funds are returned to the state via UW. Returning funds signals to the legislature JCATI is not optimizing current resources which could impact our future funding allocations.
- Recipient organizations, principal investigators, and industry partners are expected to reasonably assist JCATI in communicating funded work and its impact on the WA aerospace industry. As program funding depends on continued WA legislative support, it is vital to update state officials on JCATI's importance to the WA aerospace industry.