Center of Excellence in Applied Computational Science and Engineering (CEACSE) FY2024

Information Session
Overview

- CEACSE Program Overview
- FY2024 Competition Updates
- Proposal Preparation Instructions
- Budgeting Considerations
- Project Requirements
- Review Process
- FAQ
- Q&A
CEACSE Program Overview
CEACSE is seed funding intended to:

- Enhance and expand UTC’s capacities in CSE
- Stimulate CSE research activity across a broader range of departments
- Build capacity to attract external funds

NOT to take the place of extramural funding!
Proposals should demonstrate that they...

- Relate to modeling and simulation, big data, or data analytics
- Will result in high-impact, peer-reviewed publications
- Can “seed” larger, long-term extramural funding
1. Advanced Modeling & Simulation
2. Critical Infrastructure Protection, including Energy & Smart Grid
3. Cybersecurity & Cyber-physical Systems
4. Climate, Weather & Environmental Systems
5. Extreme Environment Technologies
6. Health & Biological Systems
7. Modeling & Simulation of Advanced Materials
8. Modeling & Simulation of Quantum Systems
9. High-Performance Computing & Algorithms
Eligibility

• UTC tenured and tenure-track faculty from ALL disciplines are eligible to serve as the Lead PI and Co-PIs.
  • Lecturers, adjuncts, post-docs, and staff who do not hold faculty appointments may serve as Co-PIs.

• Eligible individuals can be Lead PI on only 1 proposal and a team member or co-PI on no more than 2 proposals. [3 total]

• History of external funding not required!

• All teams must receive an endorsement and signature from the Lead PI’s Department Head.
Amount and Duration

- Maximum award amount: $100,000
- Project period: 12 months (July 1, 2023, to June 30, 2024)
- Anticipated number of awards: 7-9

There will be NO extensions, except under extenuating circumstances.
FY2024 Competition Updates
Important Changes

• Full budget not required; use block budgeting instead

• SciENcv must be used to develop personnel documents

• Moving to single-blind external review process
  • Reviewers will still be external and anonymous to each other and the applicants
  • Reviewers will consider all attachments in their reviews
  • Use Comments to Administrator in InfoReady Review to list individuals you don’t want to review your proposal

• Proposals will no longer be proofread or redacted before review
Proposal Preparation Instructions
Application Components:

- Applicant information
- Co-PI information
- Proposal Title
- Proposal Abstract [200 words max]
- Keywords
- IRB/IACUC
- Comments to the Administrator
Application Components:

Uploads

- CEACSE Cover Page Form
  - Signed by lead PI’s Department Head
- Proposal Narrative [7 pages max]
- Extramural Funding Plan
- Block Budget
- Curriculum Vitae for all investigators [3 pages each]
  - Must use SciENcv
- Current and Pending Support for the PI
  - Must use SciENcv
- Appendix – for resubmissions only

Instructions for each document can be found in the RFP and in InfoReady Review
• Except where noted, all uploads should be in PDF format

• All PDF documents should be sized for 8.5 in. x 11 in. paper, in one column, with 1 in. (2.54 cm) margins and 11pt type minimum (e.g., Times New Roman). (If Arial is used, the minimum size is 10pt.)
Timeline

- Proposals due: 5 PM on October 31, 2022 in InfoReady Review
- Final decisions: Spring 2023
- Projects begin: July 1, 2023
Budgeting Considerations
Allowable Costs

- PhD student support (stipend, fringes, tuition, health insurance)
- MS student support (stipend, fringes, tuition, health insurance)
- Student hourly wages
- UTC faculty or staff release/replacement costs
- Up to two months of UTC faculty summer salary
- Other personnel costs
- Fringe benefits associated with requested salary/wages
- Equipment (items valued at $5,000 or more)
- Software
- Travel
- Publication fees
- Material and supplies
- Sensitive minor equipment (items valued at $1,500 to $5,000)
Unallowable Costs

- Extra services compensation during the academic year
- Non-student administrative or clerical support costs
- Indirect or F&A costs
- Supplantation of costs (e.g., lab space) typically covered by other institutional sources
• Use rounded estimates by category based on guidance in the RFP.

• Budgets will be reviewed only to ensure that costs are allowable, reasonable, and sufficient to support the proposed scope of work.

• SimCenter will work with PIs to fine tune budgets at time of award

• Block budget template available on the program website and attached in InfoReady Review.

• A sample block budget is provided in the second tab.
Budgeting Requirements

- Floor stipend levels required for GAs
  - $24K/year for PhD GAs
  - $8k/semester for MS GAs

- Fringe benefits - 9% for students, 34% for faculty/staff

- Equipment cannot exceed 30% of total budget

- Contact Anna Lane (anna-lane@utc.edu) with CEACSE budget-related questions.
## Sample Block Budget

<table>
<thead>
<tr>
<th>Category</th>
<th>7/1/23 - 6/30/24</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personnel</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PI - list name and est. effort + 34% fringes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. A - 2 summer months + 34% fringes</td>
<td>$30,000</td>
<td></td>
</tr>
<tr>
<td>Co-PIs - list names and est. effort + 34% fringes</td>
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</tr>
<tr>
<td>Dr. B - 0.5 summer months + 34% fringes</td>
<td>$7,500</td>
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<tr>
<td><strong>Students</strong></td>
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<tr>
<td>PhD assistantship stipend + 9% fringes + tuition (fall, spring, summer) + health insurance</td>
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<td></td>
</tr>
<tr>
<td>MS assistantship stipend + 9% fringes + tuition (fall, spring) + health insurance</td>
<td>$32,500</td>
<td>1 full time ms-level assistantship</td>
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<tr>
<td>MS hourly wage + 9% fringes</td>
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<td></td>
</tr>
<tr>
<td>Undergrad hourly wage + 9% fringes</td>
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<td></td>
</tr>
<tr>
<td><strong>Other Personnel Costs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- list name/position, effort + 34% fringes</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Equipment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- limited to 30% of budget</td>
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<td></td>
</tr>
<tr>
<td>Instrument X</td>
<td>$15,000</td>
<td>needed to implement Objective 1</td>
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<tr>
<td><strong>Travel</strong></td>
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<tr>
<td></td>
<td>$4,000</td>
<td>conference travel for PI and student</td>
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<tr>
<td><strong>Materials/Supplies/Software</strong></td>
<td>$4,500</td>
<td>chemicals for project</td>
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<td><strong>Publication fees</strong></td>
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<td></td>
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<tr>
<td></td>
<td>$3,000</td>
<td>open access fees for two publications</td>
</tr>
<tr>
<td><strong>Other</strong></td>
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<tr>
<td><strong>Total Direct Costs</strong></td>
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<tr>
<td></td>
<td>$100,000</td>
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<tr>
<td><strong>TOTAL FUNDS REQUESTED</strong></td>
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<tr>
<td></td>
<td>$100,000</td>
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Project Requirements
Required Approvals

- Lead PI’s Department Head
  - must have signature on cover page

- IRB or IACUC approval*
  - not required for submission, but needed before research with humans or animals begins

- Export Control issues*

- Conflict of Interest issues*

- Additional space, equipment, or IT needs
  - must be approved in advance by appropriate administrator

*Contact ORI with questions
All awarded PIs must

- Participate in an orientation session to be held in August 2023
- Submit a brief status report by the first business day of each quarter
- Participate in a midterm meeting to share progress and discuss challenges with the SimCenter Director
- Present on research activities at the annual ReSEARCH Dialogues conference in April 2024
- Submit a final report within 60 days of award end
Extramural Funding

- **At least one** external funding application must result from each CEACSE award.

- Work with ORSP to complete and submit proposals **well in advance** of the sponsor deadline.

- Failure to apply for external funding will affect eligibility for future CEACSE awards.
Review Process
• **Intellectual Merit:** Demonstrate scientific merit in the relevant field(s)

• **Broader Impacts:** Engage with an audience outside the immediate scientific community, including grad student mentoring

• **Importance:** Original, significant, timely, and/or transformative

• **Further Funding Potential:** Strong potential to directly transform results into new extramural funding

• **Feasibility:** Realistic work plan and budget with appropriate scope

• **Strategic Excellence [internal review only]:** Align with strategic goals of the department, college, and institution
External Peer Review

• External reviewers
  • selected for their expertise in modeling & simulation and/or a specific subject area
  • Merit score based on review criteria

• Internal review panel
  • Funding decision based on merit scores, compatibility with institutional initiatives, and likely project success
FAQ
Eligibility

• I’m not tenured or tenure-track. Can I still apply?
  • Only tenured or tenure-track faculty can apply as the PI, but you can participate as a co-PI.

• Can I have a foreign co-PI?
  • No, but you may have a foreign unfunded collaborator.

• Can my postdoc be a PI?
  • No, but postdocs may be co-PIs.

• Can I apply for CEACSE funding even if I am not SimCenter-affiliated faculty?
  • Yes! We want to grow UTC’s capacity to attract funding and do research. You can help us!
- Am I required to budget for my graduate student’s health insurance?
  - Yes, if their assistantship will be funded by the award.

- Why are there required salary floors for MS and PhD student compensation?
  - The SimCenter strongly believes that the highest quality work comes from well-supported students.
• Does my project have to fit exactly within one of the nine research areas?
  • No, you can propose a project outside of the nine areas, as long as the project is directly related to data analytics, modeling, and/or simulation.

• What if I’m not sure what area my project fits into?
  • Contact Dr. Tony Skjellum (tony-skjellum@utc.edu) before submitting. Or, on your cover page, indicate the areas you feel overlap in your project.
Why do I have to use SciENcv to prepare my CV and current and pending form?

- Beginning in January 2023, NSF is requiring SciENcv to be used to prepare these documents. We want to make sure you’re ready!

Will a recording of this webinar be available?

- Yes! The recording and slides from this webinar will be posted to the CEACSE program page.
Q&A
Resources

• CEACSE Program Webpage: https://www.utc.edu/research/simcenter/ceacs
e/funding-opportunity-overview

• InfoReady Review (submission portal): https://tennessee.infoready4.com/#competitio
nDetail/1872069

• SciENcv Resources: https://www.utc.edu/research/research-and-
sponsored-programs/sciencv-guide
• **Program-related Questions**: Dr. Tony Skjellum at [tony-Skjellum@utc.edu](mailto:tony-Skjellum@utc.edu)

• **Budget-related Questions**: Anna Lane at [anna-lane@utc.edu](mailto:anna-lane@utc.edu)

• **InfoReady Review-related Questions**: Ashley Ledford at [ashley-ledford@utc.edu](mailto:ashley-ledford@utc.edu)
Thank you!