

College of Engineering Seed Grants

Motivation for the Seed Grants

Leading-edge, collaborative research activities lie at the core of The William States Lee College of Engineering's culture and success. To further advance and accelerate novel concepts in fundamental, applied, and educational research, four new seed grant programs are being supported by the College. A total of \$125,000 per year will be available to support these programs. **The primary purpose of the seed grant programs are to provide funds to stimulate activities that will lead to the development and submission of competitive research proposals to an external funding agency that provide full Facilities and Administrative (F&A) cost recovery.** The programs encourage multidisciplinary and transdisciplinary collaborations.

The following provides a list and description of each of the Seed Grant programs:

Type I: Competitive Proposal Enhancement (CPE) Grant - up to \$25,000

This category of award will provide support for research and activities that address and focus on specific feedback and proposal weaknesses identified during the external funding agency's review process with the goal of enhancing the funding potential of a proposal re-submission. Up to \$20,000 can be requested for a duration of six months to assist in strengthening the proposal, while up to \$5,000 will be made available for professional proposal development and/or pre-submission external review. The final deliverable includes the resubmission of the proposal to the same external funding agency within 12 months of receiving the seed funding. Note: The chosen funding opportunity must permit full F&A cost recovery.

Type I CPE submission specific requirements

- The proposal must have reviewed well at the specific agency;
- The received proposal ratings and reviews must be included with the application (this will not count towards the proposal description page limit);
- The proposal must explain which reviewers' comments are being addressed and how the funding will be used to address the comments;
- Other than the general eligibility requirements (see the 'PI Eligibility' section), there are no other PI constraints on this type of grant, i.e. single PI proposals are eligible; and,
- See the 'Logistics, review, and submission details' section for additional details on the proposal format, budget, submission and review processes.

Deadline: No deadline - rolling application window. However, once all the funds are consumed for the fiscal year, no new awards will be made until the subsequent year.

Type II: Multidisciplinary Team Initiation (MTI) Grants - \$10,000/\$20,000

This category of award is to facilitate the development of new collaborative research teams that have identified a research topic appropriate for an external funding opportunity. Up to \$10,000 can be

requested to prepare proposal with submitted budgets less than \$1,000,000, while up to \$20,000 can be requested for those with submitted budgets larger than \$1,000,000. In both cases the amount can be requested for 6 months. The final deliverable includes the submission of a proposal to an external funding agency within 12 months of receiving the funding. Note: The chosen funding opportunity must permit full F&A cost recovery.

Type II: MTI submission specific requirements and restrictions

- The lead PI must be from the College of Engineering;
- The proposal must have at least two PIs, and both PIs should be from different departments within the College of Engineering;
- The topic must align with the College of Engineering's strategic plan;
- The proposal must clearly explain the new collaborative/integrative aspects of the proposed work;
- The proposal must clearly explain how the funding will lead to a well-conceived proposal submitted to an external funding agency; and,
- See the 'Logistics, review, and submission details' section for additional details on the proposal format, budget, submission and review processes.

Deadline: January 9th 2024

Type III: Trans-Discipline College Initiation (TCI) Grants - \$10,000/\$20,000

This category of award is to facilitate the development of larger, transdisciplinary/multidisciplinary teams seeking funding from external funding agencies. Transdisciplinary/multidisciplinary team must span multiple colleges and offer the potential to devise convergent based solutions not feasible via traditional approaches. Up to \$10,000 can be requested to prepare proposal with submitted budgets less than \$1,000,000, while up to \$20,000 can be requested for those with submitted budgets larger than \$1,000,000. In both cases the funding is available for up to 1 year to enable concept maturation and the development of a well-conceived proposal. Note: The chosen funding opportunity must permit full F&A cost recovery.

Type III: TCI submission specific requirements and restrictions

- The lead PI must be from the College of Engineering;
- At least one PI from another college, i.e. outside of College of Engineering, must be involved in the proposal;
- The topic must align with the College of Engineering's strategic plan;
- The proposal must clearly explain how the funding will lead to a well-conceived proposal; and,
- See the 'Logistics, review, and submission details' section for additional details on the proposal format, budget, submission and review processes.

Deadline: January 9th 2024

Type IV: Education Initiative (EI) Grants - up to \$5,000

This category of award is to facilitate the development of proposals or strategies focused on enhancing the educational undergraduate and graduate programs within the College of Engineering. A total of \$25,000 has been set aside for the EI grants. Up to \$5,000 is available per award for up to 1 year to enable

concept maturation and the development of a well-conceived proposal/implementation of undergraduate and/or graduate focused activities. While proposals in the EI category are not limited to the following, it is recognized that the College has particular interest in developing programs/strategies to increase the enrollment of underrepresented, low-income and first-generation undergraduate students and our own graduates into our graduate programs.

Type IV: EI submission specific requirements and restrictions

- The lead PI must be from College of Engineering;
- The topic must align with the College of Engineering's strategic plan;
- The proposal must clearly explain how the funding will lead to a well-conceived proposal/enhanced student learning and engagement; and,
- See the 'Logistics, review, and submission details' section for additional details on the proposal format and submission etc.

Deadline: January 9th 2024

Logistics, review, and submission details

PI Eligibility

- All involved faculty must be full-time tenured/ tenure-track faculty, full-time research faculty, full-time teaching faculty, or Ph.D./Doctoral-level administrative staff (whose responsibilities include research activity) at UNC Charlotte; and,
- Adjunct faculty, post-doctoral fellows, and graduate students are not eligible to apply.

Topic Eligibility

- In all cases, the following constraints apply;
 - Topics that have already received external funding or have a proposal currently under review are not eligible for funding;
 - Topics/teams that have received internal funding are not eligible for funding, i.e. IGNITE, FRG, other UNC Charlotte college seed funding opportunities, etc.;
 - Continuation of previous or ongoing externally funded research by the same team will not be eligible for funding; and,
 - Extensions to current/past College of Engineering Seed grants are not permitted.

Review Criteria

Each proposal, no matter the type, will be reviewed with respect to the following criteria:

1. Intellectual Merit and/or Innovation:
 - Does the proposal contain creative, innovative ideas with potential to significantly advance/transform a research field?
 - Is the proposed approach feasible, well-conceived, and logical?
2. Broader Impact, Overall Impact and/or Significance.
 - Does the proposal have the potential to address societal/national/college needs?

3. Potential for Extramural Funding:

- **Will the proposed topic result in a competitive proposal?**
- **What is the targeted funding opportunity and its respective deadline?**

4. Qualification of the PI and team:

- Does the PI and team (MTI and TCI proposals) have the appropriate background, experience and training for the proposed activities?
- Does the team have complementary and integrated expertise?

5. Results from any previous College of Engineering Seed funding.

6. Alignment with College's strategic plan.

Proposal Format and Required Information

Formatting

- Size 12 font, arial
 - 1-inch margins, Single spacing
 - Letter size paper (8.5" × 11")
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Proposal content

Cover page

1. Name, Department of each PI.
2. Submission type (CPE, MTI, TCI or EI).
3. Requested amount.
4. Start date and duration.

Project summary (1 page limit)

1. Overview of the work.
2. Intellectual merit and/or innovation.
3. Broader impact, overall impact and/or significance.

Project Description (3 page limit)

1. Background and significance of the proposed project;
2. Potential impact of the proposed work;
3. Proposed activities/approach;
4. Expected results, deliverables, and time;
5. Description of how proposed activities address specific feedback from external grant reviewers (For Type I CPE proposals only); and,
6. Research team composition and expected contributions (may or may not be applicable for the CPE proposal type).

Bibliography (not counted in 3-page limit)

Limited to 20 references

Additional Items (1 page limit):

1. Alignment with the College of Engineering's Strategic plan;
2. Results from prior College of Engineering seed funding and where the last proposal was submitted. If not applicable, type N/A under the heading;

3. Targeted funding opportunity (Funding agency, program or solicitation [include URLs and funding limits], and submission deadline cycle).

Budget and budget justification (2 pages)

See below for allowable and unallowable expenses

Biographical Sketches

2 Page NSF/NIH style bio for each listed PI/Co-PI

Current and pending funding

Current and pending for each listed PI/Co-PI

Declined proposal details (Type I CPE proposals only)

1. Project summary and description of the declined proposal; and,
2. Reviews and ratings for the declined proposal.

Allowable Expenses

- Graduate and/or undergraduate student support;
- Materials and supplies for supporting tests;
- Domestic travel to external collaborators, program directors;
- Publication costs resulting from the collaborative efforts outlined in the proposal (up to \$2,000);
- Organizing workshops;
- External review of proposals/professional proposal prep; and,
- Obtaining relevant data sets.

Unallowable Expenses

- International travel;
- Funding to attend conferences;
- Faculty summer salary;
- Equipment, computers, etc.;
- General office supplies;
- Delivery of outreach programs/activities (except in the case of the EI grants);

If unsure an expense is allowable or not, please contact bamullan@charlotte.edu

Submission process

Compile the above into a single PDF and save as follows '*LeadPiSurname_Proposal Type_2024Seed.pdf*' and email to Angela Flanagan (aflanag5@charlotte.edu) by the specified date.

Committee for Reviewing Proposals:

The review committee consists of the Dean, Associate Dean for Research and a faculty member from each of the respective departments/units in the College of Engineering.