

Request for Project Proposals

Due Dates:

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|------------------------|-------------------------|
| Fall Quarter: | November 1, 2019 |
| Winter Quarter: | February 7, 2020 |
| Spring Quarter: | May 1, 2020 |

Background

The Cal Poly Interdisciplinary Projects Program (**CPConnect**) facilitates funding partnerships for interdisciplinary projects with Cal Poly faculty and students. Our mission is to provide a link between donors and resources that are available at Cal Poly to ensure that projects are properly funded and have the technical expertise required for successful completion.

Who may apply?

All Cal Poly College of Engineering faculty, students, and engineering-based student clubs are eligible to apply. Each quarter project proposals will be reviewed by the committee and selected based on a scoring rubric. The scoring rubric can be found at the end of the RFPP.

What types of projects will be funded?

All projects that enable students to explore the integration of technologies to solve problems will be considered. Proposals should emphasize projects requiring interdisciplinary participation and clearly identify the cross-department objectives and participants. Team-based projects will be given preference over individual projects. Projects should have clearly defined objectives along with an explanation identifying how the requested funds will impact each objective. If the project is a continuation of previously funded work or involves co-funding, please identify the unique and specific objectives that will be achieved with the funds you are requesting. **Preference will be given to projects that “seed” areas of new technology development for Cal Poly with a high likelihood of continuing support from other sources.**

Proposals can include funding for equipment, materials/supplies, and, in some cases, travel. Examples of travel that may be funded include travel to conferences, sponsors, and other short-term instructional, information gathering, or sharing activities. Please note that requests for funds to support travel only for competitions do not fit the objectives of

the donors and will not be funded. Requested funds should not be utilized for faculty or student salaries. Typical range for requested funds should be in the \$500 to \$5,000 range, with a maximum request of \$5,000. Total available funds to be allocated this year are approximately \$70,000, and we anticipate funding 15 - 30 projects. If your project proposal is being submitted to other sources of funding, please indicate so, and identify the time frame for decisions.

What review criteria will apply?

Proposals will be evaluated and ranked according to the following criteria:

- Project requires interdisciplinary participation & innovation
- Multi-department participation is clearly identified
- Project objectives are clearly identified and measurable
- Industry or non-profit partnership(s) and participation
- Educational merit towards implementing project-based learning
- Relevance to areas of technology identified by donor
- Potential of the funding to “seed” additional opportunities

When can projects begin?

Projects may be initiated as soon as funding decisions are made by the CPCConnect committee. Notification of award decisions will be emailed to the faculty advisor. Projects must be completed within one calendar year and anticipated start/end dates should be identified in the proposal.

What are the expected outcomes?

Each funded project **must submit a final Project Report** at the conclusion of the project; reports will be published on the CPCConnect website. A template will be provided, and will include the following:

- Executive summary with synopsis of work accomplished and significant results
- Identification of participants and field of major
- Stakeholders and impact on curriculum (did the project foster collaborations)
- Photos of student participation and details of design solutions
- List any presentations or awards associated with the project
- Acknowledge any joint funding sources
- Reflection statement detailing impact of experience on learning STEM principles

Funding by CPCConnect should also be acknowledged on all related papers and publications. Projects that have received prior CPCConnect funding and failed to submit their final report are ineligible to receive additional CPCConnect funding. Projects funded through CPCConnect are subject to Cal Poly’s Intellectual Property Policy. Information about the policy can be found at <http://research.calpoly.edu/policyIP>.

How will the funds be managed?

Once a project is funded, an account number will be provided to the faculty advisor for all charges. Project teams should work with their Faculty Advisor to submit standard CP forms for check requests and purchase orders to the CENG Dean's office, located in Building 192, Room 301 (phone: 756-2131). Please include the Project Title, Faculty Advisor, and account number on all forms submitted. Funds will be approved by the CENG Dean's office, and faculty advisors should track all expenditures to ensure the project's budget is followed. Faculty advisors are also responsible for tracking the location of all purchased equipment, materials, and supplies. Funds not utilized by the end of the project will be rolled back into the CPConnect fund for future distributions.

Is there a specified proposal format?

Each proposal should be submitted using the **RFPP Proposal Template**, which can be found on the CPConnect website or requested via email from the CPConnect Coordinator at rcrocket@calpoly.edu. All proposals must include the following information and be submitted as a pdf file:

- 1) A detailed statement of work with measurable objectives. Highlight the interdisciplinary nature of the project and how it will provide a contextual learning environment for the integration of STEM principles. Identify how innovation will play a key role in solving the problem.
- 2) Identification of a College of Engineering faculty advisor along with their contact information.
- 3) Identification of a project team with student participation from multiple departments along with the skill sets required to complete the project.
- 4) Identification of any potential industrial or non-profit partners and how this funding can be leveraged for additional or future funding.
- 5) Identify resources required to complete the project including facilities, equipment and lab space. Include a description of how your findings will be disseminated. Will any publications, presentation or participation in local or national competitions result from this project? Will the findings lead to the development of patentable intellectual property or other commercial opportunities?
- 6) Provide a time-line for completion of the project along with major milestones.
- 7) Include a budget and identify how the funds will be utilized to achieve the project objectives. If there is co-funding from other sources involved with the project, clearly

identify the sources, what their funding will cover, and the unique and specific objectives that will be achieved with CPConnect funding.

The proposal should be written as a narrative, and you should assume that your audience will include generalists as well as experts in relevant fields of technology. Proposals should be submitted via InfoReady **and must be approved by the relevant College of Engineering faculty advisor.**

Where can I get more information?

Questions and should be submitted to the CPConnect Coordinator, Dr. Robert Crockett, Associate Dean of Innovation Infrastructure, rcrocket@calpoly.edu

Proposal Submission Process

Proposals will be submitted online. A link to submit proposals is available on the CP Connect website. The committee will review and notify the faculty advisor if the proposal has been accepted for funding (typically 3 weeks after proposals are due).

CPCConnect Request for Proposal Scoring Rubric

| Criteria | Max Score | 10 - 9 | 8 - 7 | 6 - 5 | 4 - 3 | 2 - 1 |
|---|-----------|---|---|--|---|--|
| 1 Clear and measurable objectives. Clear timeframe with milestones. | 10 | Objectives clearly address problem/need; are measurable, realistic; clearly define steps to be taken to achieve project goals; provide success indicators | Provides clear objectives to address problem/need; most objectives are measurable; most steps to achieve project goals are clearly defined | Provides most of the objectives; some objectives may not be readily attainable or measurable, or are loosely linked to problem/needs | Provides some objectives; most objectives are not readily attainable or measurable; objectives are no clearly linked to problem/needs | Objectives are absent or incomplete; are difficult to understand, unrealistic; or appear unmeasurable |
| 2 Problem requires InterD solution. InterD team identified along with skill sets | 10 | Problem clearly requires InterD participation with 3 or more majors; all members of InterD team identified; skillsets needed are clearly identified | Problem requires InterD participation with 2 or more majors; some members of InterD team identified; skillsets needed are identified | Problem requires some InterD participation but still primarily within one or two majors; some skillsets are identified but not all | Problem does not clearly need InterD participation; skillsets are not clearly identified | Problem does not require InterD solution. |
| 3 Solution requires innovation. Has educational merit towards PBL. | 10 | Clearly identifies how project enhances student learning; project contains many significantly original, innovative, or creative aspects | Project contains some original, innovative, or creative aspects; identifies how project enhances student learning | The project contains no or few original, innovative, or creative aspect(s); does not clearly identify how project enhances student learning | It is not clear that the project is creative or innovative; not clear how project enhances student learning | The project is not creative or innovative; project does not speak to student's development or only in the weakest manner |
| 4 Clear objective for funds requested. Purpose of funds clearly identified. | 10 | Provides detailed and accurate budget and clear budget explanation; budget items refer to proposal topics and are realistic, budget total within guidelines, all purchasing information, such as vendors, parts numbers, and cost are provided | Provides detailed and realistic budget; budget explanation relatively clear; budget total within guidelines; vast majority of costs are justified, relevant, and essential to this project | Budget is comprehensive and reasonable but not clearly explained. Most costs are justified, relevant, and essential to this project | No budget explanation given for funds requested for project; budget is not comprehensive and reasonable; some costs are not justified, relevant, or essential | Fails to provide budget; inaccurate or unrealistic budget; budget not relevant to the proposal; total budget requested is for travel |
| 5 Plan for disseminating results. Potential for corporate/nonprofit partnerships. Potential for future funding | 10 | Dissemination of results is well planned and offered to those who would benefit from receiving them; project clearly shows a clear plan for corporate/nonprofit partnerships or other funding sources; clear identification of partnership and/or funding sources | Dissemination of results is planned; proposal shows plan for corporate/nonprofit partnerships or funding sources; sources are not clearly identified | Dissemination of results is planned but not clear who would benefit from receiving them; proposal shows plan for partnerships or future funding but not sources are clearly identified | Minimal plans offered for dissemination of results; no clear plan for additional partnerships or future funding | No plans offered for dissemination of results; no potential for additional partnerships or additional avenues of funding |
| 6 Potential to "seed" areas of new technology development for Cal Poly. Demonstration that funding will have a clear impact on the success/completion of project. | 10 | Funding is for new technology development for Cal Poly. Project cannot move forward without funding from CPCConnect. | Funding is for new or relatively new technology development for Cal Poly. CPCConnect funding would greatly aid the success/completion of the project. Project may have existing sources of funding, but funding from CPCConnect is still necessary for the success/completion of the project. | CPCConnect funding is important for the success or completion of the project. | The project has other funding sources but may be enhanced by CPCConnect money. | It is not clear that CPCConnect funding is necessary for the success or completion of the project. |
| 7 Perceived likelihood of success of proposal goals. | 10 | Project has every reasonable expectation of being completed. | High likelihood of achieving proposal goals. | Moderate probability of achieving proposal goals. | Probability of achieving proposal goals is questionable. | No perceived probability of completing proposal goals. |