

# 2020 SUMMER UNDERGRADUATE RESEARCH PROGRAM

## FREQUENTLY ASKED QUESTIONS

### Application Instructions and Submission Deadline:

<https://www.ceng.calpoly.edu/surp>

### BACKGROUND

The College of Engineering (CENG) initiated a Summer Undergraduate Research Program (SURP) in 2017. The purpose of the program is to provide research experiences for our undergraduate students working alongside our faculty during the summer. This program also supports the scholarly efforts of our faculty through engagement with undergraduate students. Projects lead to student-faculty authored publications in venues appropriate to the area of research conducted during the summer. Further, the program invites industrial and other external sponsors to provide university-industry collaborative research and project activities.

This program supports Cal Poly's educational mission as both faculty members and students are provided a significant opportunity for their professional growth. SURP students gain valuable training in research methods and practices, professional experience, have opportunities to apply classroom knowledge and theories in a research setting, and work in a team environment. Through collaboration with faculty members and external sponsors, SURP students gain "Learn by Doing" research experience that will support their growth as a student and set a foundation to build on as they pursue their career goals. Depending on the project, students may have tangible products such as data sets, hardware prototypes, software code, other forms of intellectual property, abstracts and/or research posters, and co-authored publications. SURP faculty participants are able to implement the teacher-scholar model while making progress in their area of research. Partnerships with industrial and external sponsors through SURP support the California State University's mission of preparing significant numbers of educated and responsible people to contribute to California's economy, culture, and future. Industrial and external SURP project sponsors gain a head start in cultivating professional relationships with talented and motivated SURP students.

### Who Can Apply?

All undergraduate students in the College of Engineering (CENG) are eligible to apply for the 2020 Summer Undergraduate Research Program (SURP). Preference will be given to lower division students (students completing their freshman or sophomore year) who have not previously participated in SURP. Seniors graduating during the 2019 – 2020 academic year or who are entering a Cal Poly graduate program during the 2019 – 2020 academic year are not eligible to apply.

### How do I select the research topics / faculty mentor to work with?

SURP has solicited and selected research project topics from CENG faculty. All selected research topics and associated faculty mentors for SURP 2020 will be posted on the CENG website in early April: <https://www.ceng.calpoly.edu/surp/>. Please review these research topics and indicate your top three project choices. Also indicate whether you

would be open to other projects if your top three are not available. You are encouraged to discuss your application with the faculty mentor of interest.

**When does SURP start and how long does it last?**

SURP is an 8-week long program, and SURP students are expected to spend at least 20 hours/week working on their research projects. SURP students and their faculty mentor agree upon a start date for their research project that falls within the summer 2020 quarter. While the 8-week SURP project must be completed during the summer 2020 quarter, the 8 weeks need not be contiguous. SURP students may not use any time worked beyond 20 hours/week to shorten the 8-week duration of the program.

**Is there a specific application format?**

Applications are submitted online. Instructions and application link will be posted on the CENG website in early April: <https://www.ceng.calpoly.edu/surp/>. Applications must include a resume and a cover letter that indicates your top three project choices, as well as why this opportunity is important to you. Also indicate in your cover letter whether you would be open to other projects if your top three are not available.

**How will students be selected for SURP 2020?**

Associate Dean Robert Crockett will review the applications and work with the identified faculty mentor to make a final decision and inform the selected student participant(s).

**What review criteria will apply?**

Student applications will be evaluated and matched to faculty projects based on the student-project fit, as determined by the student's resume and cover letter; preference will be given to lower division students (students completing their freshman or sophomore year) who have not previously participated in SURP.

**What is the Application Submission Deadline?**

The deadline for SURP 2020 application is mid-April. The exact date will be posted on the CENG website in early April: <https://www.ceng.calpoly.edu/surp/>.

**How do I submit my application?**

Applications are submitted online using Cal Poly Handshake. Instructions and application link will be posted on the CENG website in early April: <https://www.ceng.calpoly.edu/surp/>

**When will I know if I have been selected to participate in the 2020 CENG SURP?**

Associate Dean Robert Crockett will notify the selected students by no later than April 30, 2020.

**Do I need to do fill out any additional paperwork after I have been selected to participate in SURP?**

All selected students will be asked to review and sign the SURP participant Commitment and Expectations form.

**How much compensation will each SURP student participant receive?**

Each SURP student participant will receive a CENG Summer Research Grant of \$3,000. SURP students will not receive additional funding for working more than 20 hours/week or for more than 8 weeks. This grant will be disbursed through the Financial Aid Office.

**Does SURP provide housing and meals for its student participants?**

No. SURP student participants are responsible for finding and paying for their own housing and meals for the duration of the program.

**Can a student receive funding for working on more than one research topic?**

No. A selected student can receive only one CENG SURP research grant.

**Can a student participate and receive funding from multiple SURP programs?**

No. Other colleges at Cal Poly run SURP programs and may permit CENG students to participate. However, students are limited to participation in only SURP program at a time at Cal Poly.

**Where can I get more information?**

Questions should be submitted to Robert Crockett, Associate Dean for Innovation Infrastructure: [rcrocket@calpoly.edu](mailto:rcrocket@calpoly.edu) (805) 756-2131.

**STUDENT EXPECTATIONS**

- SURP research projects last 8 weeks and requires at least a 20 hour/week commitment from the student participants. It is expected that SURP students will meet regularly with their faculty mentor to discuss progress on their project. SURP students are also expected to participate in campus events associated with the program that may take place during or after the summer (e.g., a SURP symposium).
- The CENG SURP is open only to students working toward earning a baccalaureate degree in CENG (i.e., CENG students who have graduated are ineligible for SURP). Preference will be given to students completing their freshman or sophomore years who are applying to the SURP for the first time. Students must be in good academic standing at the time of their application to SURP and at the time of the beginning of SURP if they are selected for the program.
- Requests to be excused from SURP-related activities need to be made to the faculty mentor for the project and any industrial or external sponsor with at least one week notice in writing (except in emergency cases, as determined by the faculty supervisor). Requests to be excused from SURP-related activities may be approved with the understanding that the student will make up the missed research hours before the end of the summer. The expectation is that SURP students will complete the research goals of their project during the 8-week period by putting in the necessary time and effort to ensure a meaningful professional research experience.
- A SURP student may be dismissed from the program and/or have one or more grant installments withheld as a result of unsatisfactory performance in the program, as determined by the faculty mentor and any industrial or external sponsor in consultation with the Associate Dean. A written warning of unsatisfactory performance along with reasonable corrective action(s) to be taken by the student must be provided to the student by the faculty mentor at least one week before payment of a grant installment if withholding of a grant installment or dismissal is contemplated.
- As a SURP participant, the student will conduct research under the guidance of a CENG faculty mentor. The student may be expected to participate in project meetings, workshops, seminars, and field trips throughout the summer. A research/project definition document including a schedule of activities, expectations, and deliverables

will be provided to the student during the first week of the program or upon request. While some amount of preparatory research (e.g., literature review) may be required prior to or as part of a project, the majority of the student's time shall not be spent on such preparatory work.

- The student may be required to report and reflect on his/her research experience using a variety of approaches (e.g., written reports, videotaped oral presentations, photo essays, audio-only recordings, digital video productions, online discussion boards, wikis, etc.). Reports and submissions will be reviewed and archived by the Associate Dean to support program assessment efforts. Report exemplars and other SURP-related submissions may be shared via the CENG website, used in future marketing and recruiting efforts, and/or disseminated as a means of broadening the impact of the research outcomes. Participation in the SURP implies agreement to participant's image or likeness and SURP-related submissions for this purpose.
- In support of program assessment and evaluation, students may also be asked to complete surveys and questionnaires during and after the program. Students may be asked to maintain contact with their faculty mentor after the program to allow for tracking of academic performance and career progress. Participation in the SURP implies agreement of the participant to these terms. Student confidentiality will be protected during the collection and archiving of program assessment data and evaluation results of the program.
- CENG retains the option of withholding one or more grant installment(s) from a student and/or dismissing a student from the program who does not follow the requirements or meet the expectations listed above.

## **END OF RESEARCH/PROJECT REPORTING EXPECTATIONS**

Each SURP student will be expected to create the following items by October 31 of the year of their program participation.

1. **SURP Project Report Submission:** After approval by your faculty mentor and any external sponsor, upload your final SURP Project Report to the college website: <https://engineering.calpoly.edu/surp/>. If your faculty mentor and any external sponsor agrees, the results/report may also be uploaded to Cal Poly Digital Commons.
2. **Conference and/or Journal Publications:** It is strongly encouraged to submit the results of the research and/or project activity for publication in an appropriate conference or journal publication. Among the SURP goals are to help the professional development of students and faculty.
3. **Project Presentation.** Each year, at the discretion of your faculty mentor and any industrial or external project sponsor, a presentation on the SURP work is expected from the student. It is anticipated that an annual SURP symposium will be organized so that stakeholders and supporters can gather together to benefit from the knowledge generated and gained from SURP activities each year.