

# Student-Assistants in Cal Poly, Facilities Planning and Capital Projects

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The Cal Poly, Facilities Planning and Capital Projects Department has been an under utilized resource for students who desire the opportunity to work in the field while attending school. This internship-like opportunity would give the student an opportunity to step into the shoes as an owner's representative. With over sixty separate construction projects consistently occurring around campus, students should be given the opportunity to work under supervision of a Cal Poly Project Manager as a student-assistant. Through multiple interviews with the Cal Poly, Facilities Planning and Capital Project Department Project Managers, it was agreed that there was a need to develop an application with a coversheet and informational flyer for people within the department to view. The application has been revamped to include things such as a LinkedIn Profile, availability schedule and an opportunity to relay any relevant information that may not have been discussed. Along with the application is an informational coversheet, explaining the responsibilities that a student may be placed with as a student-assistant. Lastly, the development of an informational flyer for the Project Managers will depict what students are not only learning in their classes, but have also experienced in their summer internships. These three deliverables will open up opportunities for many different students to apply what they are learning in their studies to real-world situations.

**Key Words:** Facilities Planning, Capital Projects, student-assistant, internship, owner's representative

## Introduction

This senior project has one primary goal: make the Cal Poly, Facilities Planning and Capital Projects Department (FPCP) more accessible to students. I currently work as a student-assistant for FPCP, rotating my time on three different projects: *Vista Grande*, *Student Housing* and *I-Field Improvements*. In each project, I am given a wide range of responsibilities, in which I have the opportunity to put what I have learned through my studies to real-life use. Unfortunately until this point, there is little to no communication that stems directly from the Cal Poly, Construction Management Department to FPCP. I have spent my time over this past quarter conducting interviews around campus in order to bridge this gap, improving upon the steps that are currently in place for FPCP to hire student-assistants.

When applying for this position, I found the application process needed modernization and enhancements. The application itself was visibly out of date, lacking key components that allow a student to fully represent and advertise him or herself. Specifics to improvements that have been made will be elaborated on in the deliverables section. In order for students to comprehend and apply for an open student-assistant position, it is important for them to have a strong understanding of what it is that Facilities Planning and Capital Projects does and what responsibilities will be asked of them as student-assistants.

With this being said, I have also created a *Student Cover Sheet*, in order for students to understand FPCP better. This informational sheet will be presented along with the application itself. It elaborates on FPCP and the day-to-day responsibilities that may be given to a students-assistant. It also goes on to give some background of Facilities Planning and Capital Projects and the different sectors within the department.

Lastly, I developed a flyer that will be posted and handed out around the Facilities Planning and Capital Projects Department. One of the biggest goals of this senior project is to present a student's abilities to the current FPCP Project Managers. This flyer will not only showcase the type of tasks a student can take on, but also create a desire to bring more students into the department, ultimately creating great learning opportunities for new students to take advantage of.

## **Process**

Immediately upon being hired on by FPCP, I understood what an incredible opportunity this was. I would be working as an owner's representatives for Cal Poly. I figured this was a common opportunity for most students, but quickly learned I was wrong. Many students do not receive this great on-campus student-employment opportunity due to two primary reasons: (1) students do not know about FPCP and (2) many project managers do not know the capabilities of students.

I began the process by sitting down with my Senior Project Advisor. We both recognized the lack of communication between the CM Department and the Cal Poly, Facilities Management and Capital Projects Department. In order to develop a better relationship between the two, I decided to come up with three separate deliverables: CP Application, Student Cover Sheet, and Project Management Flyer. These three deliverables will allow students to better present themselves on an application, give students a better understanding of what is being asked of them, and create a flyer for project managers to review and understand what students are / should be capable of.

In order to better refine the application, I conducted an interview with the Recruitment and Training Specialist for Facilities Customer and Business Services. Through this interview, I was able to gain an understanding of the current application process (Handshake), and what opportunities could be implemented into the application process. In reformatting and ultimately altering the application, I added things such as an opportunity to paste a LinkedIn URL, Drop-Down Availability Schedule and an area for the applicant relay any other relevant information he/she may want to convey to FPCP.

In development of the student-assistant cover sheet, I held interviews with the three other student-assistants. I wanted to capture all the scope of work that student-assistants were taking on. With all of us coming from a different area of study (Construction Management, Architectural Engineering, Architecture and City & Regional Planning), all of us were working on different aspects of the same job. These interviews allowed me develop a responsibility list with a minimum of fifteen activities that a student-assistant could get assigned to do. The goal in doing this it to show the student what learning opportunities he/she can expect.

Lastly, I held interviews with multiple FPCP Project Managers in order to develop the Project Management Flyer. This is arguably the most important aspect about this project. The FPCP Project Managers have little idea what educational background students have. In my own interviews, I was able to relay to them my multiple internships, class schedule and inter-collegiate competition experience. Many of the project managers had little idea that many students carry the same type of experience while taking multiple estimating and scheduling courses through our curriculum. In doing this, I determined it was necessary to develop this flyer. It will give the project managers a better understanding of what a student can accomplish on a project, while creating a desire to bring on more student-assistants.

## **Deliverables**

### *CP FPCP Student Application*

My first deliverable for this project is a two page application to be used by the Facilities Planning and Capital Project Department. This application is fully functional and will allow students to type directly into the sheet without skewing the formatting. It corrects to allow to space provide all necessary information.

The application calls for information such as: Applicant's name, Address, LinkedIn URL, Graduation Date, Employment References and Schedule Availability. These main aspects are also accompanied by a section in which the applicant has the opportunity to disclose any other information they feel relevant that may have been missed or misunderstood on the application itself.

The application is broken into four primary sections. The first section includes details such as *First Name, Last Name, CP ID Number, Address, Contact Information, LinkedIn URL, Major GPA* and an opportunity to list any life experience that help qualify the applicant for the position. The second section asks for two employer references. I expect applicants to have work experience that they can refer back to, allowing the current Human Recourses Chair for Facilities Planning and Capital Project to contact. The next section gives the applicant a chance to fill out an availability work schedule for review. I have implanted the use of a pull-down menu in 30-minute time increments to allow the student to specifically detail when they are available to work. Lastly, I leave an open opportunity for the student to relay any information that he/she may feel should be stated. I recognized that many students have certain circumstances that may not be able to be communicated in a standard application.

Date: \_\_\_\_\_

**CAL POLY**  
College of Architecture  
& Environmental Design

**UNIVERSITY OF CALIFORNIA**  
SANTA BARBARA

*Facilities Management and Capital Projects*  
*Student Assistant Position*

**Student Assistant Application.** Please staple Resume. Type directly into form. Email directly to [cpfacilities@calpoly.edu](mailto:cpfacilities@calpoly.edu) or submit filled out application to Building 70, Room 200

|                                                                                                              |                      |                                                   |                       |
|--------------------------------------------------------------------------------------------------------------|----------------------|---------------------------------------------------|-----------------------|
| First Name:                                                                                                  | Middle Initial:      | Last Name:                                        | CP ID Number:         |
| School Address:                                                                                              | City:                | Zip:                                              | Contact Phone Number: |
| Contact Email:                                                                                               | LinkedIn URL:        |                                                   |                       |
| Major:                                                                                                       | Minor:               | Year Status:                                      | Graduation Date:      |
| Major GPA:                                                                                                   | Overall GPA:         | Currently Employed: No                            | Work Study: No        |
| If currently employed, please state where / responsibilities / amount of hours worked per week below:        |                      |                                                   |                       |
| Are you willing to work the following times: Head Week: Yes/No Finals Week: Yes/No Breaks: Yes/No Summer: No |                      |                                                   |                       |
| Range of Hours willing to work per week (Maximum of 20 hours):                                               |                      | Do you have a California Driver's License: Yes/No |                       |
| Please provide any life experiences that help qualify you for the student-assistant position below:          |                      |                                                   |                       |
| <b>Employment References (2)</b>                                                                             |                      |                                                   |                       |
| Employer:                                                                                                    | Contact Name:        | Phone Number:                                     |                       |
| Responsibilities:                                                                                            |                      |                                                   |                       |
| Employer:                                                                                                    | Contact Name:        | Phone Number:                                     |                       |
| Responsibilities:                                                                                            |                      |                                                   |                       |
| <b>Personal References (2)</b>                                                                               |                      |                                                   |                       |
| Name:                                                                                                        | Relationship to you: | Phone Number:                                     |                       |
| Name:                                                                                                        | Relationship to you: | Phone Number:                                     |                       |

**Figure 1 – CP Facilities Planning & Capital Projects Student Application [Front]**

On this schedule please indicate available work hours by writing "Available" using the drop down menu in the hour blocks in which we could expect you to work. Beneath the schedule, you can add any important notes that you would like us to take into consideration when going through the interview process.

| Times    | Monday        | Tuesday       | Wednesday     | Thursday      | Friday        |
|----------|---------------|---------------|---------------|---------------|---------------|
| 8:00 AM  | Not Available | Not Available | Not Available | Not Available | Not Available |
| 8:30 AM  | Available     | Not Available | Not Available | Not Available | Not Available |
| 9:00 AM  | Available     | Not Available | Not Available | Not Available | Not Available |
| 9:30 AM  | Not Available | Not Available | Not Available | Not Available | Not Available |
| 10:00 AM | Not Available | Not Available | Not Available | Not Available | Not Available |
| 10:30 AM | Not Available | Not Available | Not Available | Not Available | Not Available |
| 11:00 AM | Not Available | Not Available | Not Available | Not Available | Not Available |
| 11:30 AM | Not Available | Not Available | Not Available | Not Available | Not Available |
| 12:00 PM | Not Available | Not Available | Not Available | Not Available | Not Available |
| 12:30 PM | Not Available | Not Available | Not Available | Not Available | Not Available |
| 1:00 PM  | Not Available | Not Available | Not Available | Not Available | Not Available |
| 1:30 PM  | Not Available | Not Available | Not Available | Not Available | Not Available |
| 2:00 PM  | Not Available | Not Available | Not Available | Not Available | Not Available |
| 2:30 PM  | Not Available | Not Available | Not Available | Not Available | Not Available |
| 3:00 PM  | Not Available | Not Available | Not Available | Not Available | Not Available |
| 3:30 PM  | Not Available | Not Available | Not Available | Not Available | Not Available |
| 4:00 PM  | Not Available | Not Available | Not Available | Not Available | Not Available |
| 4:30 PM  | Not Available | Not Available | Not Available | Not Available | Not Available |
| 5:00 PM  | Not Available | Not Available | Not Available | Not Available | Not Available |

Below please relay any other relevant information. (Click on Grey Box)

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Figure 2 – CP Facilities Planning & Capital Projects Student Application [Back]**

*Student Cover Sheet*

My second deliverable is the Student Informational Cover Sheet. This gives the student an opportunity to understand what tasks and responsibilities they will potentially be assigned over the course of their student-assistant position. When coming up with the list of responsibilities, I primarily focused on tasks that had been asked of the current student-assistants for Facilities Planning and Capital Projects.

This cover sheet will serve as the advertisement to students. I wanted to use bright colors in order to catch the student's eye, while keeping the formatting professional. The picture used on the top-half of the sheet is a rendering of the future *Student Housing* project. It will then have a description of what types of jobs they will be placed on while giving an explanation of the difference between Minor and Major Capitol Projects. My goal in doing this is to be as transparent as possible with the student in regard to what may be asked of them. This sheet will be used along side the application for students to directly understand what they are applying for.

The following are tasks that I used as examples of what can be expected of students during their time as a student-assistant: *RFI Review & Processing, Daily Reports, Filing & Scanning Construction Documents, Quantity Takeoffs, CAD Drawings, OAC Meeting Minutes and Site Photos & Man Count.*

## LOOKING FOR ON-CAMPUS EMPLOYMENT OPPORTUNITIES?



GET REAL-WORLD EXPERIENCE. JOIN THE WORKFORCE. GET PAID.

### DEPARTMENT: FACILITIES PLANNING & CAPITAL PROJECTS

Gain the experience of working as an Owner-Representative by working for Cal Poly, Facilities Planning and Capital Projects. Some of the day-to-day responsibilities of a *student-assistant* under a project manager's supervision are listed below:

|                                            |                                    |                                      |                                 |
|--------------------------------------------|------------------------------------|--------------------------------------|---------------------------------|
| - RFI Review / Processing                  | - Quality Assurance                | - Quantity Take Offs                 | - Confirming Plan Delivery      |
| - Daily Reports                            | - Bid Documents Review             | - CAD Drawings                       | - Rendering Development         |
| - Filing & Scanning Construction Documents | - Submittal Registrar Development  | - Site Photos / Man Count            | - OAC Meeting Minutes           |
| - Change Order Review                      | - Submittal Review / Processing    | - Site Layout Development            | - Confirming Program Management |
| - Confirming Onsite Conditions             | - Subcontractor Meeting Attendance | - Confirming Conformance to Schedule | - Plan Room Coordination        |

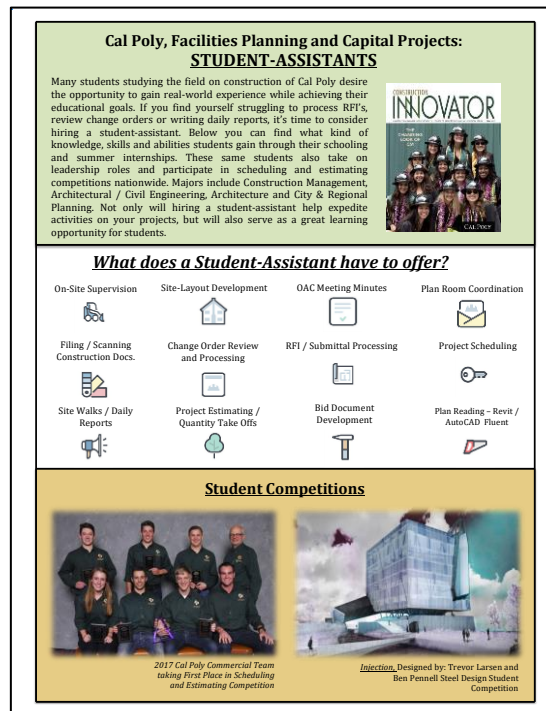
Facilities Planning and Capital Projects is broken into two separate divisions: Major (valued over \$650,000) and Minor (valued under \$650,000) Projects. This allows you to be exposed to a wide variety of developments, such as *Vista Grande*, Student Dorms, Intermural Turf Field, Facilities Maintenance and much more. If interested, please fill out the attached application and follow the detailed instructions. Be sure to attach your résumé.

**Figure 3 – CP Facilities Planning & Capital Projects Student Informational Cover Sheet**

### *Project Management Flyer*

My final deliverable is a Project Management Flyer that can be given out to the FPCP Project Managers. Through all my interviews with the Project Managers, one thing stood out: the project managers did not understand how much students have to offer to their projects. This quickly sparked the idea to relay to them through something tangible that they can refer back to.

Many students develop real-world experience during their summer internships, major classes and student competitions. I began developing a flyer that will demonstrate to the project managers the wide ranging value students have to offer. The top of the flyer is to spark the reader's interest, while referencing the CM Department Magazine, in which they can see awards students have received in the past year. The middle portion is a list of tasks and abilities that students are able to head. Many of the same tasks can be referenced to the "Student Cover Sheet". Lastly in the bottom section, I reference two separate competitions that show a diversity amongst the different majors at this school, again showcasing what a willing student can bring to their project.



**Figure 4 – CP Facilities Planning & Capital Projects Project Manager Flyer**

## Lessons Learned

It is not as easy to change a currently in place application system as I thought it was going to be. Through all the meetings and interviews held with current FPCP Project Managers, I recognize that this senior project is just a small step toward getting students more integrated into that department. Currently there is some turnover in FPCP that has slowed the process of implanting these new ideas, but I feel as though my voice has been heard. I have developed the necessary products in order to “open the eyes” of the leaders of FPCP. I also feel that my performance as a student-assistant has played a strong role in the organization and development of this senior project, allowing me to connect with the necessary individuals.

As for each individual deliverable, I have found that in person interviews are the best way to gain desired information. In the beginning of the project, I found myself relying on feedback over email, but quickly found this was an inefficient way to go about receiving advice and opinions. I quickly switched over to setting up interviews with prospective individuals, allowing me to gather all the information I needed to compile these deliverables effectively.

As for the project as a whole, I took away two aspects: do not procrastinate till the end of the quarter and take advantage of your SME. Fortunately I feel as though I had a head start on this project as I had brought it up with my manager at FPCP. However in talking with my peers, I recognize that I am in the minority, as many are struggling to balance finals along with wrapping up their Senior Project. I was also lucky enough to have a very involved SME, whom was well connected with FPCP. We worked very well together when developing the goals of the project and pushing the execution and product to its fullest. At the time of my report, no determination has been made as to the viability and use of this application process.

## **Future Research**

This senior project has laid the foundation for the goal of getting more students involved in Cal Poly's Facilities Planning and Capital Project Department. As this project came to a close, I found that in order to make this dream a reality, more work would need to be done over a longer period of time. With the Facilities Planning and Capital Project undertaking some major department changes, more steps need to be taken in order to achieve this objective. These opportunities lie with further carrying out the application process by working with the Human Resources Director of Facilities Planning and Capital Projects. The Human Resources Director is ultimately responsible for the screening process of student-assistant applicants. He / She carries the responsibility of vetting and assessing résumés received, and forwarding the best-suited candidates to the Project Managers. From here, project managers determine who they would like to interview with, thus narrowing the pool of perspective student-assistant. In working with the Human Resources Director, one can further implement the *Project Manager Flyer, Student Informational Cover Sheet & Application*.

Along with the implementation of the three deliverables I have created, I believe there is a huge opportunity for a student to work with the head of the Facilities Planning and Capital Projects Department to build a constant form of connection between FPCP and the Construction Management Department. One idea could be to form this connection through a monthly update of available student-positions. From there, one can send out a Construction Management Department wide email regarding these opening. Building this strong connection will grow the relationship between the two departments and accelerate the process of giving more students an opportunity to work for the Facilities Planning and Capital Projects Department.