



Fullerton College

Self-study for Construction Technology Program

2025

Section 1: Introduction

1. Briefly describe your program, make sure to include how your program helps the College achieve its mission.

Program Description and Mission Alignment

The Construction Technology Department at Fullerton College provides high-quality, hands-on education that prepares students for careers in construction, electrical systems, renewable energy, and facility management. Our program directly supports the college's mission by promoting student success, workforce readiness, and equitable access to technical education. Through rigorous lecture and lab courses, students gain practical skills that translate into immediate employability and long-term career growth.

Despite these successes, the department faces systemic barriers that undermine the college's mission. Strategic needs identified in multiple program reviews—such as expanded lab space, sustainable material budgets, and essential equipment—remain unmet. The most critical issue is the misappropriation of **\$6 million in Measure J bond funds**, which were

approved by voters for educational facilities but diverted to construct a Maintenance & Operations building for administrative convenience. This decision disregards the bond's intent and deprives students of resources essential for learning and workforce development.

The Construction Technology Department asserts that this matter warrants **District Attorney review** to ensure compliance with Measure J and restore funds for their intended purpose: student learning and career preparation. Our strategic vision includes reclaiming the M&O building for educational use, launching a Facility Management program, and creating structured internships with campus facilities staff—all without requiring additional budget allocations. These actions will realign resources with the college's mission and deliver tangible benefits to students and the community.

Our commitment remains unwavering: **Building Careers, On Point, and On Purpose** for every student learner. We will continue to advocate for accountability, transparency, and resource allocation that honors the promises made to our students and the public.

Section 2: Students

2.1 Student Demographics and Enrollment Trends

1. Using the data provided by the OIE, describe the student population your department serves. Which demographic groups have the most enrollments in your program? Which student groups are underrepresented in your program? Has the demographic profile of your program changed over the last four years?

The Construction Management program primarily serves a diverse student population reflective of the college's service area. Based on OIE data, the largest enrollment groups in the program are Hispanic/Latino and White students, while Asian and African American groups have consistently improved since the Covid pandemic. Regarding gender, while the programs continue to be predominantly male, the female student group has enjoyed a consistent 20% overall attendance. Over the past four years since the pandemic, demographic profile has shown a gradual increase in Hispanic/Latino enrollment at nearly 70% and consistent growth in female participation currently at 19%.

-
2. Briefly describe course-level enrollment trends in your program over the past five years. Have the enrollment trends in your program changed over the last five years? To what do you attribute any changes or lack of changes?

Students taking Construction Management courses for General Education credit differ from program majors in that GE students often represent a broader range of academic goals and tend to enroll in introductory courses, whereas majors progress through sequenced technical coursework. GE students typically exhibit pathways towards four-year college transfers and tend to be in the younger age profile, compared to program majors. What is not represented in OIE information is the return of older, more established adults with bachelor's degrees. From my own internal conversations with my students, current degree holding adults, from prestigious academic schools, cannot afford to live in Southern California. Currently, I have older students with bachelor's degrees in business management and bioscience from Cal State Fullerton who are only taking construction management courses from Fullerton College to gain an associate degree in construction management to access employment in an extremely viable and enticing construction employment environment.

3. How do you monitor and modify course offerings, including time and modality, to ensure that students' needs are being met?

Monitoring course offerings in the past has been limited by adjunct faculty who work full-time jobs. But now with the added full-time instructor, offerings for courses will tend to be more robust, allowing students better access to courses as needed. Enrollment trends over the past five years since the pandemic have shown a consistent steady increase in enrollment. Factors contributing to these changes include regional construction industry demand due to the economic climate, outreach efforts, and expanded lab - course offerings. To meet student needs, the program regularly reviews enrollment patterns and adjusts course scheduling to accommodate learners by offering evening classes that now include evening lab availability to accommodate working students and non-traditional learners.

2.2 Student Achievement

1. Using data provided by the OIE, describe overall student achievement counts, rates, and trends in your program over the past five years, these include: course success rates, degrees/certificates completion counts, transfer counts, licensing, job placement, wage improvements (not all of these measures apply to every program).

OIE data show that overall student achievement in the program has remained strong, with course success rates averaging 70% over the past five years. Degree and certificate completions have improved steadily up to 50%, and job placement rates remain high due to strong industry partnerships and the current job market. Wage improvement data indicate that program completers experience significant earnings growth compared to entry-level positions.

-
2. Are there student groups whose success rates are below the institution-set standard or whose success rates are below other student groups? What factors can explain this?

Despite these positive outcomes, achievement gaps persist among certain student groups. For example, female students tend to complete their intended academic pathway while Hispanic / Latin students have success rates below the institution standard and below other groups most likely due to entering the work force needing jobs instead of degrees or certificates. Contributing factors may include limited prior exposure to construction careers and external work-life balance challenges.

3. In terms of your degree and certificate completers, are there any groups who are underrepresented in your completion data compared to the overall enrollment in your program?

Completion data reveal that Filipino is underrepresented among degree and certificate earners relative to their enrollment share. Time-to-completion analysis shows most students complete within 3 years, though part-time students and working adults often require extended timelines. To address these issues, the program has implemented strategies such as enhanced academic advising, flexible evening scheduling, and targeted faculty support services to improve completion rates and equity.

4. Are your students completing your degree and certificate program requirements in the expected time frame? Are there certain groups whose rates are below other student groups? Discuss any efforts to improve time to completion.

Current mix of student profiles include majority of part-time learners. Fulltime students do tend to complete programs within the 3-year completion rate. However, part-time students tend to increase available time due to only taking one or two classes per semester and usually in the evenings due to working during the day.

2.3 Student Learning Outcomes

1. Describe your program's processes and practices for defining, assessing, and analyzing student learning outcomes at the course (CSLO) and program (PSLO) level. Include a discussion of how your program uses the results of CSLO/PSLO data to inform course and program improvement efforts.

The program maintains a systematic process for defining, assessing, and analyzing Student

Learning Outcomes (SLOs) at both the course (CSLO) and program (PSLO) levels. Faculty collaboratively review SLOs during curriculum meetings and align them with industry standards and accreditation requirements. Assessment occurs on a rotating cycle, with results documented within the school's SLO database and discussed during department meetings.

2. (OPTIONAL/NOT REQUIRED) Using the data provided by OIE, describe the most salient results of CSLO or PSLO mastery rates. Did you find significant differences by race, ethnicity, gender, and other categories?

CSLO and PSLO data are used to inform continuous improvement efforts, such as revising instructional materials, integrating emerging technologies, and enhancing hands-on lab experiences. Recent OIE data indicate overall mastery rates of females at 100% while males 50%, with notable strengths in technical competencies and project management skills. However, analysis by demographic categories reveals Hispanic / Latino students rated 50% while White / Other Non-Hispanic rated overall at 67% with Hispanic / Latino four-times the registration versus the White / Non-Hispanic group, prompting targeted interventions such as supplemental lab workshops, activities and tutoring.

Section 3: Other Areas of Program Effectiveness

1. Document any substantial changes to your program curriculum since the last review and discuss what prompted these changes. Looking forward, what changes to the curriculum do you plan based on the emerging needs of your discipline, industry, student population, etc.

Substantial Changes Since Last Review

Since the last program review, the Construction Technology curriculum has maintained its strong emphasis on hands-on learning and safety standards. While no major course redesigns have occurred, the department has adapted to increased post-pandemic enrollment demand by implementing shared teaching loads between full-time and adjunct faculty and allowing limited over-enrollment in lab courses with dean approval. These measures were necessary to ensure student access despite constraints in space and staffing.

- Maintained strong emphasis on hands-on learning and safety standards.
 - No major curriculum redesigns but adapted to post-pandemic enrollment surge.
 - Implemented shared teaching loads between full-time and adjunct faculty.
 - Allowed limited over-enrollment in lab courses with dean approval to meet demand.
-

2. Please briefly describe opportunities your students have to apply and deepen knowledge and skills through projects, apprenticeship, internships, co-ops, clinical placements, group projects outside of class, service learning, study abroad, and other experiential learning activities that you intentionally embed in coursework or elsewhere in your program.

Planned Curriculum Changes

Looking forward, the department plans to strengthen integration of emerging technologies and industry practices, including AI-driven estimating tools and digital project scheduling platforms, to align with workforce expectations. Additionally, we aim to expand experiential learning opportunities through partnerships with local contractors for internships and job-site visits. These enhancements will require additional faculty, improved classroom technology, and expanded lab space—needs that have been repeatedly justified and approved in prior reviews but remain unmet.

- Integrate emerging technologies such as AI-driven estimating tools and digital scheduling platforms.
- Expand experiential learning through contractor partnerships for internships and job-site visits.
- Hire an additional full-time instructor to reduce overload and improve course availability. (Just completed hire process – new instructor on board this semester)
- Secure expanded lab space and upgrade classroom technology for modern instruction.
- Obtain a department truck for cost-effective material procurement and delivery.

3. Describe any laws, regulations, trends, policies, procedures, or other influences that have an impact on your program. These can include things like Vision 2030, CALGETC, Common Course Numbering, etc.

Experiential Learning Opportunities

Experiential learning is a cornerstone of our program. Lecture/lab courses such as CSTR 06 (Residential Plumbing), CSTR 07 (Residential Electrical), and CSTR 100 (Residential Construction) provide students with direct engagement in construction activities, reinforcing theoretical concepts through practical application. Students manipulate materials, operate tools, and complete projects that mirror real-world conditions. Many pursue certificates or degrees, while others enroll for personal skill development. This hands-on approach fosters curiosity, confidence, and career readiness.

- Lecture/lab courses (e.g., CSTR 06, 07, 60, 65, 100, 102, 104) provide hands-on construction activities.
- Students manipulate materials, operate tools, and complete real-world projects.
- Flexible pathways allow pursuit of certificates, degrees, or personal skill development. Emphasis on safety and best practices ensures industry-ready graduates.

External Influences on the Program

Several external factors impact our program:

- **Industry Trends:** High demand for skilled labor continues to challenge adjunct recruitment, as professionals often prioritize field work over teaching.
- **Economic Pressures:** Rising material costs and delivery fees strain our finite budget, compounded by the lack of a department truck for cost-effective procurement.
- **Policy and Planning:** Vision 2030 and CALGETC requirements will influence future curriculum alignment and transfer pathways.
- **Post-Pandemic Dynamics:** Increased enrollment demand underscores the urgency for additional faculty and lab space to maintain safety and quality instruction.

Despite limited administrative support for previously approved recommendations, the Construction Technology Department remains committed to **Building Careers, On Point, and On Purpose** for every student learner.

Section 4: Faculty and Staff

4.1 Population and Demographics

1. Using the data provided by OIE, describe your program's staff (full-time/part-time faculty, nonfaculty, classified). How reflective of your program's student population is your staff?

4.1 Program Staffing and Demographics

- **Current Staffing (Fall 2025):**
 - 2 full-time faculty (one existing, one new tenure-track hire).
 - 6 adjunct faculty.
- **Demographic Breakdown:**
 - Full-time faculty: 100% White.
 - Adjunct faculty: ~10% Black, ~20% Hispanic, ~70% White.
- **Reflection of Student Population:**
 - Faculty demographics partially reflect student diversity but do not fully mirror the broad representation of our student body.
- **Hiring Process Context:**
 - During recent full-time and adjunct hiring cycles, no qualified diversity candidates applied.

Candidates who identified as diverse either failed pre-screening or lacked required teaching experience and industry qualifications.

- Those who interviewed were not qualified in critical areas needed for program success.
 - The department remains committed to diversity and equity in hiring, but qualified applicants in construction education remain scarce.
-

2. Describe your program's staffing changes since fall 2021. How have these changes impacted your program's ability to achieve its strategic action plans?

4.2 Staffing Changes Since Fall 2021

- Added one new full-time tenure-track faculty member in Fall 2025.
 - Reduced adjunct pool slightly (from 7 to 6) due to scheduling adjustments.
 - **Impact on Strategic Action Plans:**
 - The additional full-time faculty improves program stability and leadership capacity.
 - However, adjunct reliance remains high, which limits flexibility for curriculum development and student support initiatives.
-

4.2 Staff Support and Professional Development

1. Describe the regular discussions your program faculty are having about equitable grading, attendance, late work, extra credit policies, and other strategies to support equitable student success.

Faculty Discussions on Equity

- Regular communication includes:
 - **Weekly emails** addressing student challenges and equity considerations.
 - **Monthly meetings** focused on grading policies, attendance, late work, and extra credit strategies.
 - Emphasis on supporting students in academic difficulty through flexible deadlines and supplemental resources.
-

2. How have these conversations shaped practices or policies in your program? What action has arisen from these discussions? If no action has been taken, why not?

Impact of These Conversations

- Adoption of more flexible grading and attendance policies.
 - Increased use of extra credit opportunities to help students recover from setbacks.
 - Strengthened commitment to equitable practices across all courses.
-

3. What additional areas of professional development could help your faculty and staff engage in this work?

Additional Professional Development Needs

- Administrative support for:
 - Program review and curriculum updates.
 - Facility maintenance and technology upgrades.
 - Marketing and web design for program visibility.
 - Electronic media and digital content implementation.
 - Training in:
 - Inclusive teaching strategies.
 - Emerging construction technologies and digital tools.
 - Data-driven approaches to equity and student success.
-

Section 5: Program Planning

5.1 Progress on Previous Strategic Action Plans

1. Please discuss the goals (Strategic Action Plans, SAPs) from your last self-study. Assess and explain your progress on each of the SAP.

Progress on Previous Strategic Action Plans

- **Operational Lab Space:** Despite repeated justification and approval in prior reviews, no additional operational lab space has been allocated. This failure continues to restrict hands-on training opportunities, particularly for advanced construction and electrical modules.
- **Delivery Truck Acquisition:** A delivery truck has been approved for several review cycles but remains unprovided. The full-time instructor continues to use a personal vehicle for material transport without compensation—an unacceptable liability and operational inefficiency.
- **Full-Time Faculty Hire:** A major success occurred in Fall 2025 with the addition of a tenure-track faculty member, strengthening instructional capacity and program leadership.

- **Material Budget Adjustments:** Material costs have risen over 40% since the last review cycle, yet the program budget has not been permanently adjusted. A one-time stipend was granted for Fall 2025, but ongoing funding remains inadequate, limiting the ability to maintain quality lab experiences.
 - **Impact of Funding Gaps:** The lack of sustained funding has constrained program expansion, delayed implementation of advanced training modules, and placed undue burden on faculty. While the temporary budget increase in Fall 2025 provided short-term relief, it did not address systemic resource deficiencies.
-

2. If additional funds were NOT allocated to you in the last review cycle, how did the LACK of funds have an impact on your program?

We self-recycle materials to gain credit towards material replacement for other classes. Instructors supplement program by purchasing some necessary materials and equipment to ensure student success.

SAPs

SAP 1: Development of an Operational Outdoor Enclosed Laboratory

Short Description:

• Description: Construct an outdoor enclosed lab designed for evening classes, supporting EV charging installation and maintenance, Solar PV systems, residential/commercial electrical training, and building energy management. • College Objectives: Workforce readiness, equity in access, sustainability. • Measurable Outcome: Increase enrollment in advanced technical courses by 25% and improve completion rates for electrical and renewable energy certificates. • Resources Needed: Facilities allocation, construction materials, a full-time classified employee to oversee lab materials and handling, tool inventory, and additional assistance in lab activities and monitor safety equipment.

Measurable Outcomes:

Growth of classroom sizes increasing head count in lab courses. Better monitoring of student activities and safety. Better time management from having assistance with lab prep and readiness for instructors. This classified position could potentially increase head count in lab courses by 20%.

College Goals:

3.2 Reduce equity gaps in degree/certificate completion

SAP 2: Integration of Facility Management Program into New Maintenance & Operations (M&O) Building

Short Description:

• **Description:** Utilize the newly constructed M&O building—funded through Measure J—for educational purposes, including facility management training and internships. Measure J was approved by voters for educational facilities, not for pet projects or administrative convenience. Redirecting this space for student learning restores compliance with the bond’s intent and corrects a misappropriation of public funds. • **College Objectives:** Student success, fiscal responsibility, community engagement. • **Measurable Outcome:** Launch Facility Management program by Fall 2026, with 50 students enrolled in the first year and internship placements for at least 20 students. • **Resources Needed:** Access to M&O building spaces, coordination with classified staff for internship supervision. • **Note:** This initiative requires no additional budget; operational savings will be reinvested into program development.

Measurable Outcomes:

More space - more students - expansion of current available facilities - more prestige - better facility management.

College Goals:

1.2. Increase equitable usage of apprenticeship/internship

SAP 3: On-Campus Internship Program for Facility Maintenance

Short Description:

• **Description:** Establish structured internships where students work alongside classified staff in campus facilities management, gaining real-world experience in HVAC, electrical systems, and building operations. • **Measurable Outcome:** 100% of Facility Management students complete at least one internship before graduation. • **Resources Needed:** Administrative coordination and scheduling support.

Measurable Outcomes:

Actual student experience for on-the-job-training preparing students for entry level employment positions.

College Goals:

1.2. Increase equitable usage of apprenticeship/internship

SAP Phase:

New

SAP 4: Curriculum Expansion for Emerging Technologies

Short Description:

• Description: Incorporate AI-driven construction management tools, advanced safety analytics, and green building certifications into core courses. • Measurable Outcome: Update 100% of program courses by 2027 to include emerging technology modules. • Resources Needed: Faculty training, software licenses, and updated instructional materials.

Measurable Outcomes:

Giving students updated necessary skills and training to compete with coming technology and advances in the work force.

College Goals:

1.3 Night, weekend, online degree program

SAP Phase:

In Progress

SAP 5: Sustainable Budget Adjustment for Material Costs

Short Description:

• Description: Secure permanent budget increase to offset rising material costs and maintain high-quality lab experiences. • Measurable Outcome: Ensure uninterrupted delivery of lab-based courses and reduce reliance on temporary stipends. • Resources Needed: Institutional budget reallocation.

Measurable Outcomes:

Less stress and uncertainty for the program, students, and instructors. This will be imperative for future growth and educational competition.

College Goals:

2.2 Increase access/usage of Basic Needs

SAP Phase:

New
