CALIFORNIA STATE UNIVERSITY EAST BAY

ACADEMIC SENATE

Committee on Academic Planning and Review

ANNUAL PROGRAM REPORT

College	Science
Department	Engineering
Program	B.S. Construction Management
Reporting for Academic Year	2024-2025
Last 5-Year Review	2022-2023
Next 5-Year Review	2027-2028
Department Chair	Cristian Gaedicke
Date Submitted	10/12/2025

SELF-STUDY *(suggested length of 1-3 pages)*

A. Five-Year Review Planning Goals

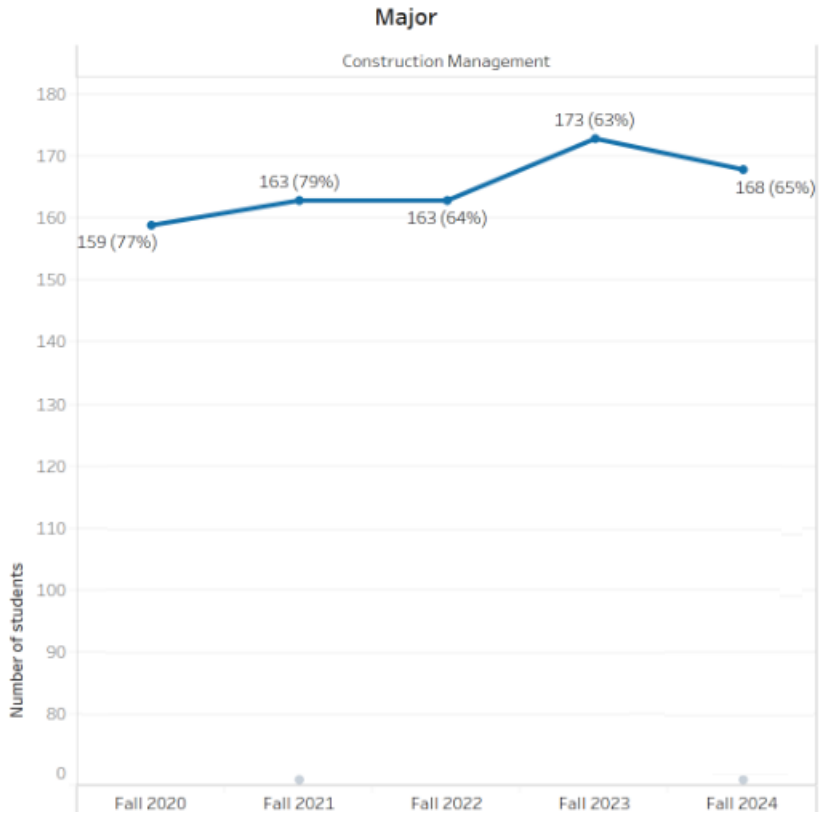
1. We have continued to grow, and continue to support students to get internships and to succeed in our courses. We completed the Accreditation Board of Engineering and Technology **(ABET)** visit in September 2021.

2. Faculty: We hired one additional faculty member, Dr. Roya Nasimi, starting in Fall 2023. She has experience in structural engineering and laboratory development and is supporting our Construction Management program by teaching courses in statics and surveying.

3. Research: Construction Management faculty are active in research and have been successful in securing funding. Their work focuses on construction/engineering education and virtual reality in construction. The STEM camp for high school students from West Contra Costa County, funded by Chevron for the 11th consecutive year (Summer 2025), is a key initiative. Faculty are also involved in several other STEM education grants.

4. Equipment: Through A2E2 annual funding, IT refresh cycles, and support from the College of Science, we've maintained and upgraded Construction Management labs. Recent investments include surveying equipment, soil lab tools, and an infrared camera.

5. Enrollment: Enrollment in the Construction Management program has grown significantly since its inception in Winter 2009—from 6 students to 168 in Fall 2024. Despite challenges during and after the pandemic, enrollment has remained steady. Preliminary data for Fall 2025 shows continued growth.



6. Excess credits: n/a.

B. Progress Towards Five-Year Review Planning Goals

1. We successfully completed the ABET visit in September 2021.

2. During this period, we lost two Construction Management faculty. We hired two tenure-track faculty: Dr. Bita Astaneh, who is fully focused on Construction Management, and Dr. Roya Nasimi, who primarily teaches Civil Engineering courses. We've also hired lecturers with extensive experience in both private and public sectors. With increasing enrollment, we need one additional Construction Management faculty member.

3. The remodeling of the materials lab (SSC 247) has been completed. It now serves as a lab/active learning classroom and Surveying lab. Additionally, space in VBT 217 has been secured for an advanced technology lab. We've hired new faculty in technology and structures and acquired equipment to support research and collaboration. A new active learning classroom has also been developed in South Science 125.

4. Enrollment has increased substantially over the past decade and continues to trend upward. Our student population is diverse: 78% URM, including 75% Latinx and 3% Black students. Our average time to degree has improved, especially for first-year students. The ratio of regular faculty to lecturers has declined due to program growth and faculty teaching in Civil Engineering, highlighting the need for additional hires.

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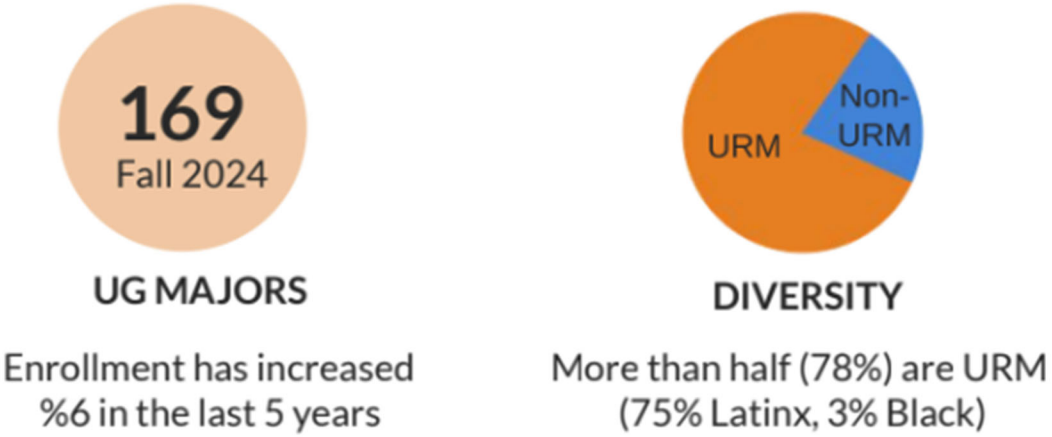
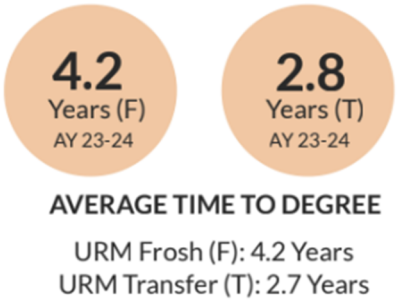
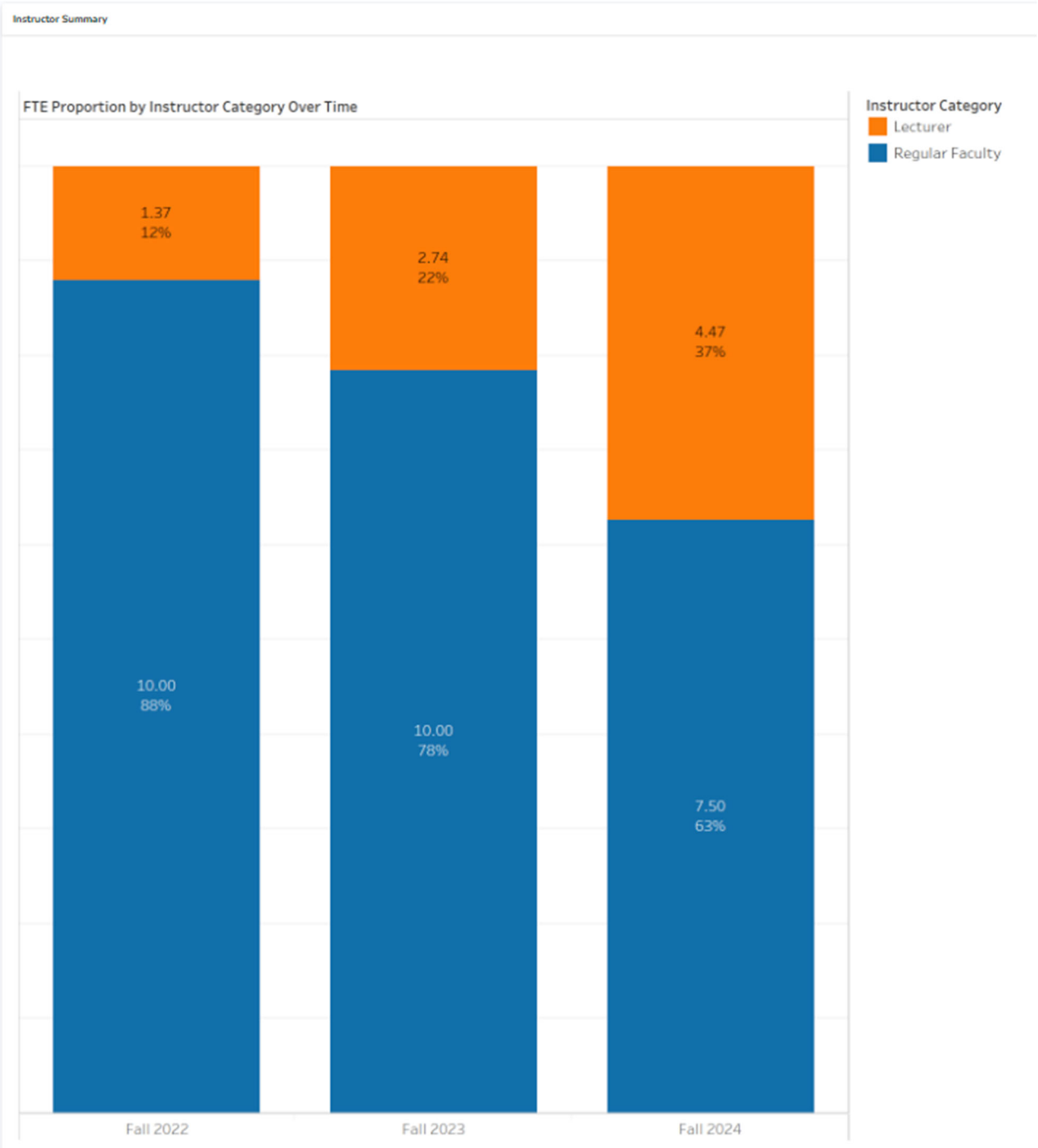


Our Average time to degree is excellent (with particular improvement in Frosh), as shown below:



Our proportion of regular faculty to lecturers has declined significantly in recent years, primarily due to program growth and the reassignment of some regular faculty to teach in the Civil Engineering program. This underscores the need to hire an additional faculty member dedicated to Construction Management.



C. Program Changes and Needs

Report on changes and emerging needs not already discussed above. Include any changes related to SB1440, significant events that have occurred or are imminent, program demand projections, notable changes in resources, retirement/new hires, curricular changes, honors received, etc., and

their implications for attaining program goals. Organize your discussion using the following subheadings.

Overview: The Construction Management program began in 2010 and has grown steadily. Despite post-pandemic enrollment declines across the university, our program has remained stable and continues to grow.

Curriculum: The curriculum has been redesigned to include more active learning and align with current employment trends in construction management. We were awarded ABET accreditation in July 2022.

Students: Demand for Construction Management graduates remains strong. Most students' complete internships during the academic year, and graduates are employed primarily in the Bay Area. We maintain strong industry connections and host regular meetings and job fairs.

Faculty: Dr. Farzad Shahbodaghlou joined in 2009 as Director of the Construction Management Program. Dr. Cristian Gaedicke joined in 2012, followed by Drs. Akhavian (2015) and Castronovo (2016). After Drs. Akhavian and Castronovo left, we hired Dr. Bita Astaneh. Drs. Shahbodaghlou and Gaedicke are tenured full professors; Dr. Astaneh is tenure-track.

Staff: We have one full-time staff advisor, Mrs. Lisa Holmstrom, and a lab technician, Mr. Linh Nguyen. We also receive administrative support from the Computer Science–Engineering HUB.

Resources: Room SSC 247 has been remodeled into a flexible lab-lecture space for 36 students. Room SSC 125 is a new active learning classroom for Construction Management and Civil Engineering students.

Assessment: An extensive assessment process has been completed. Sample results are provided below.

SUMMARY OF ASSESSMENT *(suggested length of 1-2 pages)*

Program Learning Outcomes (PLO)

Students graduating with a B.S. in Construction Management will be able to: on	
PLO a ILO 6	Have knowledge in the core construction management areas (construction materials and methods, safety, codes, scheduling, commissioning, planning and control, project management, construction law, cost accounting, human resources management, environmental and safety issues in construction).
PLO b ILO 1,6	Have knowledge in broad areas of construction management beyond the core areas.
PLO c ILO 2	Ability to communicate effectively.
PLO d ILO 3,4	Ability to function in teams.
PLO e ILO 5,6	Have the knowledge of sustainable building and construction techniques and relevant state regulations.
PLO f ILO 4,5	Have an awareness of the complex environment (involving professional and ethical responsibilities) in which they will practice their profession.
PLO g ILO 1,6	Ability to educate themselves and be prepared for lifelong learning and professional development.
PLO h ILO 1,6	Have experience in solving real life problems.

We have assessed the following PLOs for the Construction Management program during the 2024-25 Academic Year:

Year 2: 2024-2025	
1. Which PLO(s) to assess	PLO (2) An ability to formulate or design a system, process, procedure or program to meet desired needs. Have experience in solving real life problems. (ILO 1,6)
2. Is it aligned to an ILO	Yes, ILO 1,6
3. Sample (courses/# of students)	h-CMGT 440; Construction Project Management;
4.SlO from the course	Determine accurate costs and schedules for maintaining projects within budget and time constraints. Identify project delivery methods and associated risks. Analyze contractual information and bidding and procurement processes.
5.Assessment indicators	h-Project and exams;
6.Assessment instrument	Program rubric
7.Time (which semester(s))	h-Fall 2024;
8.Responsible person(s)	h-TBD;
9.Ways of reporting (how, to who)	The results (quantitative) will be reported by faculty to the department chair via completion of the course Faculty Self-Assessment form.
10. Ways of closing the loop	Interaction between chair, faculty and industrial advisory board

Assessment of SLO:

Instructor: Bita Astaneh Asl
Course: CMGT 440
Term: Fall 2024
Enrollment: 32

Course Summary
This course covers various project management concepts, including roles and responsibilities, delivery methods, labor relations and supervision, administrative systems, project control, computer tools for project management, documentation, quality management, commissioning, and process improvement.

Student Learning Outcomes
Upon successful completion of this course, students will be able to:

- Determine accurate costs and schedules for maintaining projects within budget and time constraints;
- Identify project delivery methods and associated risks;
- Analyze contractual information and bidding and procurement processes.

Course Learning Outcomes:

By completing this course, students will:

- gain knowledge in the core construction management areas including but not limited to project management, cost control, planning and scheduling, and human resources management.
- understand the responsibilities of different project participants
- gain knowledge about the construction business enterprise
- gain skillsets in some construction management computer programs

Summary of Student course performance:

The assessment tool was Exam 2. This exam focused mainly on project delivery methods, project control for cost and schedule, contractual agreements, project administration documents, bidding, and procurement processes.

We considered that this outcome is met when at least 70% of students achieve at least 70% on this exam. In 2024, 93.75% of students had a score of 70% or above on Exam 2. This improvement was made possible by providing more course review sessions in class and in-class activities, which allowed students to apply the course material in practice.

Student comments: Student comments were all positive.

Summary of Faculty experience & observations:

Active learning has been instrumental in this course. It made the class more engaging for the students and helped them learn the course materials.

SUMMARY OF ACHIEVEMENT OF COURSE OUTCOMES

RECOMMENDED CHANGES

- Recommended changes based on student course performance: none
- Recommended changes based on student evaluations and comments: none
- Recommended changes based on faculty experience & observations: increase in-class activities
- Other comments and recommended changes: none

Assessment Plans for Next Year

Summarize your assessment plans for the next year, including the PLO(s) you plan to assess, any revisions to the program assessment plan presented in your last five-year plan self-study, and any other relevant information.

We will assess the following PLO's in this academic year.

Year 3: 2025-2026	
1. Which PLO(s) to assess	PLO (3) An ability to develop and conduct experiments or test hypotheses, analyze and interpret data and use construction science and professional judgement to draw conclusions. (ILO 4,5)
2. Is it aligned with ILO	Yes, ILO 4,5
3. Course name and number	CMGT 360; Soil Mechanics and Building Foundations
4. SLO form the course	d- Analyze the properties of different types of soil.
5.Assessment indicators	d-Laboratory Project
6.Assessment Instrument	Program rubric
7.Time (which semester(s))	d-Spring 2026
8.Responsible person(s)	d-Prof. Astaneh
9.Ways of reporting (how, to who)	The results (quantitative and qualitative) will be reported by faculty to the department chair via completion of the course Faculty Self-Assessment form.
10. Ways of closing the loop	Interaction between chair, faculty and industry advisory board

DISCUSSION OF PROGRAM DATA & RESOURCE REQUESTS

Each program should provide a one-page discussion of the program data available through CAPR. This discussion should include an analysis of trends and areas of concern. Programs should also include in this discussion requests for additional resources including space and tenure-track hires. Resource requests must be supported by reference to CAPR data only. Requests for tenure-track hires should indicate the area and rank that the program is requesting to hire. If a program is not requesting resources in that year, indicate that no resources are requested.

Discussion of Trends & Reflections

Notable Trends:
Summarize and discuss any notable trends occurring in your program over the past 3-5 years based on program statistics (1-2 paragraphs). You may include 1-2 pages of supplemental information as appendices to this report (e.g., graphs and tables).

- Recruiting and employment
- Enrollment
- resources

Reflections on Trends and Program Statistics:
Provide your reflections on the trends discussed above and statistics and supplemental information presented in this report.

Request for Resources:

A2E2 provides sufficient funding for laboratory maintenance.

Request for Tenure-Track Hires:

We are requesting a new tenure-track Construction Management professor, to cover the additional teaching load stemming from the growth of the program (expected to be 189 in Fall 2025), and the fact that tow of our construction management faculty are also teaching in Civil Engineering.

Request for Other Resources

N/A

DISCUSSION OF PROGRAM DATA & RESOURCE REQUESTS

A. Discussion of Trends & Reflections Notable Trends

According to data from CSUEB the BS in construction management has been growing steadily since its inception. The growth stabilized since the pandemic, while overall number of students

have decreased at CSUEB. Preliminary data from Fall 2025 indicates that the growth is continuing, increasing approximately 12%.

The CSUEB Construction Management Program is the only program of its kind in the Bay Area. The closest undergraduate program is at Sacramento State University and there is no similar Master's program in Northern California.

The construction industry is strong is California, and it providing plenty of job opportunities to our graduates. The construction Management program at CSUEB is unique as the courses are scheduled in such a way that students can do part-time internship throughout the academic year. This academic innovation and our location in the heart of the Bay allow our student to acquire professional experience and earn extra income, while studying at CSUEB.

Many of our Latinx students (78% of our Construction Management students) are bilingual, which is an important asset in the construction industry. Additionally, our students graduate with OSHA 30 Construction Safety certification and some also earn the LEED Green Associate sustainable construction credential.

Notable Trends:
Summarize and discuss any notable trends occurring in your program over the past 3-5 years based on program statistics (1-2 paragraphs). You may include 1-2 pages of supplemental information as appendices to this report (e.g., graphs and tables).

1. We have successfully been awarded the ABET accreditation in 2022.
2. We have offered an exclusive bi-annual Career Day/Job fair for CMGT students starting in 2012. The first event was attended by 1 construction company and 14 students and since it has grown to over 35 companies and between over 90 students participating.

Reflections on Trends and Program Statistics:
Provide your reflections on the trends discussed above and statistics and supplemental information presented in this report.

We anticipate that this program will be growing given the level of interest and our outreach efforts to community colleges. However, it is important that the university continues to provide support (such as travel funds) to allow our faculty to interact with the construction industry to promote our students and graduates.

Request for Resources (suggested length of 1 page)

Upkeep of the laboratory software and hardware, access to large computer lab/classes for some of the courses. The calibration of our lab equipment is not current. We anticipate that calibrating the equipment will cost approximately $20k.

Request for Tenure-Track Hires:

We are requesting one tenure-track position for the CMGT Program at this time, to account for the growth in our program and faculty being reassigned from to teach civil engineering courses. Our freshmen courses are reaching the size where 2 sections of a class are required. We saw this in Fall 2025 for CMGT 101, which is the introductory construction management freshmen class).

Request for Other Resources

We will need some faculty release time to prepare for the renewal of our program accreditation.