EXECUTIVE SUMMARY

Goal 1  Maintain a Program that encompasses an appropriate blend of:
General Education, Mathematics & Science, General Business Management, Construction Management & Technology.
Met ☑
Not Met □
Notes: 

Goal 2  Secure adequate and appropriate resources and support for the Program from both within and without the university community.
Met ☑
Not Met □
Notes: 

Goal 3  Recruit and hire well-qualified faculty possessing a beneficial blend of advanced academic credentials and industry-based construction management experience in the United States of America.
Met □
Not Met ☑
Notes: Administration has not allocated any faculty positions to the CMGT department.

Goal 4  Provide for and encourage the continual up-dating of faculty expertise.
Met ☑
Not Met □
Notes: 

Goal 5  Maintain an atmosphere for students emphasizing involvement and collegiality.
Met ☑
Not Met □
Notes: 

Goal 6  Maintain high curricular rigor and student performance expectation level.
Met ☑
Not Met □
Notes: 

Goal 7  Maintain a high degree of program recognition at the campus, state, and national level.
Met ☑
Not Met □
Notes: 
GOAL 1. Maintain a Program that encompasses an appropriate blend of:
   General Education
   Mathematics & Science
   General Business Management
   Construction Management & Technology

Objective
1.1 ACCE accreditation of the Program shall be maintained.
   Measure(s):
   • ACCE accreditation has or has not been maintained.

Analysis

In order to satisfy this requirement, the following tasks have been completed:
1. The Report was sent to ACCE on June 1, 2015
2. A Supplemental Data Report (the “Supplemental Report”) was sent to ACCE on July 1, 2015
3. An ACCE Accreditation Team Visit is scheduled for October 3 through 6, 2015

It is anticipated that based on the above activities the Program will be awarded six-year accreditation by ACCE.

Objective
1.2 Alumni and student feedback on the curriculum shall be sought and evaluated.
   Measure(s):
   • Senior exit survey
   • Alumni survey

Analysis
1.2 The following tasks have been completed:
1. Senior Exit Surveys have been conducted by the Program annually. Results from three (3) years of Senior Exit Surveys (2012-2013, 2013-2014, 2014-2015) have been summarized and actionable items are being addressed by the faculty.
2. Construction Company Recruiters & Alumni Surveys have been conducted by the Program annually.

The results of the surveys are reported in the Report and Supplemental Report. The objective has been met.
Objective
1.3 Industry feedback on the curriculum will be sought and evaluated.
Measure(s):
- Industry Advisory Council (IAC) survey
- IAC curriculum committee input
- Employer survey

Analysis
1.3 Industry feedback on the curriculum has been obtained and evaluated. The results of the surveys are set forth in the Supplemental Report. A summary of the survey results follows:

**IAC Survey Results for the Question:**
Please EVALUATE the Department of Construction Management’s current curriculum by ranking from 1 to 10 (1 being not necessary for your operations to 10 Essential to your operations)

<table>
<thead>
<tr>
<th>CMGT Course Number and Title</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Concepts of Construction</td>
<td>7.3</td>
</tr>
<tr>
<td>110 Construction Graphics</td>
<td>5.6</td>
</tr>
<tr>
<td>135 Construction Materials and Systems</td>
<td>7.5</td>
</tr>
<tr>
<td>210 Analysis of Construction Drawings and Specifications</td>
<td>8.8</td>
</tr>
<tr>
<td>235 Electrical and Mechanical Systems</td>
<td>6.2</td>
</tr>
<tr>
<td>330 Principles of Soil Mechanics and Foundations</td>
<td>7.3</td>
</tr>
<tr>
<td>332 Construction Methods Analysis</td>
<td>7.1</td>
</tr>
<tr>
<td>335 Construction Equipment</td>
<td>6.7</td>
</tr>
<tr>
<td>340 Principles of Statics</td>
<td>6.2</td>
</tr>
<tr>
<td>345 Mechanics of Materials</td>
<td>6.3</td>
</tr>
<tr>
<td>352 Electrical Construction Estimating</td>
<td>4.5</td>
</tr>
<tr>
<td>360 Construction Project Management</td>
<td>8.2</td>
</tr>
<tr>
<td>440 Temporary Structures</td>
<td>6.1</td>
</tr>
<tr>
<td>450 Construction Estimating</td>
<td>8.7</td>
</tr>
<tr>
<td>455 Construction Cost Management</td>
<td>8.7</td>
</tr>
<tr>
<td>457 Project Control and Scheduling</td>
<td>8.8</td>
</tr>
<tr>
<td>458 Heavy Construction Estimating</td>
<td>6.3</td>
</tr>
<tr>
<td>460 Legal Aspects of Construction</td>
<td>8.2</td>
</tr>
<tr>
<td>462 Construction Contracts</td>
<td>8.5</td>
</tr>
</tbody>
</table>
GOAL 2. Secure adequate and appropriate resources and support for the Program from both within and without the university community.

Objective
2.1 Parity with respect to Program funding within the college will be maintained.
Measure(s):
• Compare funding between Departments and College

Analysis
2.1 The California State general funding maintains the Program faculty and staff salaries and some operating expense. The industry and alumni support enables a margin of operating quality. The primary indicators of the Program’s success have been the increasing student demand, graduate placement and on campus recruiting statistics.

See Section 2.1.2.1 of the Report for the revenue and expenditure data comparisons of (1) the Departments with the College and (2) the Department. To the extent of the institutional support and limitations, parity of funding between Departments within the College and the Department has been maintained.

Objective
2.2 Parity with respect to faculty compensation within the College will be maintained.
Measure(s):
• Compare funding of faculty compensation between Departments in the College

Analysis
2.2 Faculty in the Department have lower department average salaries than College averages at the Full Professor level due to an abandoned Designated Market Discipline (DMD) salary scale for hard to hire faculty which included Engineering, Computer Science, and Business. See Figure 4.1.5.1 of the Report. Many Full Professors remain in Engineering and Computer Science that were on DMD salary schedule, which skews the average salary upward in this category. All recently promoted Full Professors in the College have a salary closer to the Departments average. Objective not fully met. This is an on-going concern.

Objective
2.3 Parity with respect to student/faculty ratios within the college will be maintained.
Measure(s):
- Compare student/faculty ratios between Departments in the College

Analysis
2.3 Construction Management went from having the highest SFR in the College in AY 2010-11 to the Lowest in AY 2013-14, but was near College average AY 2014-15. See Figure below. This objective has been met.
Objective

2.4 Outside funding will be secured equal to or exceeding 10% of institutional college funding received.

Measure(s):
- Compare the amount of “outside” funding to the amount of “institutional” funding.

Analysis

2.4 The following Table from the Report demonstrates that this objective has been met.

<table>
<thead>
<tr>
<th>Source</th>
<th>2011-2012</th>
<th>2012-2013</th>
<th>2013-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional Funds</td>
<td>$815,102</td>
<td>$536,982</td>
<td>$891,107</td>
</tr>
<tr>
<td>Consolidated course fees</td>
<td>$10,288</td>
<td>$10,303</td>
<td>$10,575</td>
</tr>
<tr>
<td>Instructionally related activities (IRA)</td>
<td>$3,000</td>
<td>$3,000</td>
<td>$3,000</td>
</tr>
<tr>
<td>California State General Funding</td>
<td>$828,390</td>
<td>$550,285</td>
<td>$904,682</td>
</tr>
<tr>
<td>Annual Fund Donations</td>
<td>$12,630</td>
<td>$6,520</td>
<td>$14,340</td>
</tr>
<tr>
<td>Construction Company Contributions</td>
<td>$58,000</td>
<td>$48,000</td>
<td>$69,500</td>
</tr>
<tr>
<td>Calif. Contractor’s License Board - Construction Management</td>
<td>$48,387</td>
<td>$57,970</td>
<td>$59,210</td>
</tr>
<tr>
<td>Construction Employers Association</td>
<td>$22,500</td>
<td>$20,000</td>
<td>$28,000</td>
</tr>
<tr>
<td>Totals</td>
<td>$141,517</td>
<td>$132,490</td>
<td>$171,050</td>
</tr>
<tr>
<td>Total Operating Revenue</td>
<td>$969,907</td>
<td>$682,775</td>
<td>$1,075,732</td>
</tr>
</tbody>
</table>

Figure 2.1.2.1-5 from the Self Study describes all sources of revenue for the last three years.
GOAL 3. Recruit and hire well-qualified faculty possessing a beneficial blend of advanced academic credentials and industry-based construction management experience in the United States of America.

Objective
3.1 All new tenure track faculty will have a minimum of five years of industry-based construction management experience in the United States of America.
Measure(s):
- Analyze construction management experience of new tenure-track faculty

Analysis
3.1 There have not been any new tenure track faculty hires since 2007 due to declining enrollment.

Objective
3.2 All new tenure track faculty will possess a minimum of a master’s degree in construction management (or a closely related discipline), or will obtain such a degree within three years of hire.
Measure(s)
- Analyze educational qualifications of new tenure track faculty

Analysis
3.2 There have not been any new tenure track faculty hires since 2007.

Objective
3.3 All new tenure track faculty should have significant and successful prior teaching experience at the college or university level.
Measure(s)
- Analyze prior teaching experience of new tenure track faculty

Analysis
3.3 There have not been any new tenure track faculty hires since 2007.

Objective
3.4 A part time/temporary faculty applicant pool containing a minimum of ten (10) qualified (at a course-specific level) applicants will be maintained.
Measure(s)
- Analyze size and qualifications of the part time temporary applicant pool.

Analysis
3.4 Objective met. The Department is looking to increase both the size of the pool and the area of specialization/experience of the candidates.
GOAL 4. Provide for and encourage the continual up-dating of faculty expertise.

Objective
4.1 Each full time tenure track faculty member will engage in a minimum of one significant professional experience every academic year.

Measure(s):
- Require and analyze a report by each full time tenure track faculty as to professional experiences/engagements

Analysis
4.1 Objective met. See Table below.

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Engage in a minimum of one significant professional experience every academic year.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joel Arthur</td>
<td>Participated in a year-long Chairs Leadership Group workshop for new chairs on campus. Was successful in obtaining a grant from Sacramento Municipal Utilities District (SMUD) for a student competition to build a Tiny Home, and attended a Tiny Home workshop at SMUD's headquarters. Wrote and was awarded an internal research grant to develop a smart residential energy management system for off-grid solar photo-voltaic electric powered homes.</td>
</tr>
<tr>
<td>Michael Borzage</td>
<td>Architectural design and building construction.</td>
</tr>
<tr>
<td>Lori Brown</td>
<td>Provided a two-day LEED BD+C v4 workshop at ten different companies throughout the U.S. to help prepare industry members to take and pass the LEED BD+C exam. Taught at the Mechanical Electrical Academic Consortium (MEAC) - Mechanical and Electrical Faculty Boot Camp sponsored by MCAA and NECA that was held this summer in Siloam Springs, Arkansas, June 3-5, 2015. Was invited as one of only four professors to teach fifteen faculty selected from universities from across the United States the electrical course material</td>
</tr>
<tr>
<td>Denny Gier</td>
<td>Attended a week-long Faculty Development workshop on BIM Integration at Sundt Construction's Car Rental Project for the San Diego Airport, San Diego, CA.</td>
</tr>
<tr>
<td>Richard Holman</td>
<td>Instructed courses at the HCSS Annual Conference to more than 500 Heavy Civil Contractors.</td>
</tr>
<tr>
<td>Willem Kymmell</td>
<td>Participated in the DBIA workshops to become a certified professional DBIA member and am also able to teach the DBIA certification classes at CSU Chico. Provided industry design and construction professionals with BIM workshops to facilitate the integration of BIM into professional practice.</td>
</tr>
</tbody>
</table>
John Schwarz

Worked on various consulting projects including:
Consultation for a multimillion dollar renovation for a state of the art breast care center which opened in June 2015. Services provided included pre-construction planning and permits, coordination of financing (construction and SBA take-out loan), review of prime construction contract, preparation and coordination of lien waivers for payment of subcontractors, and project closeout information.

Preparation of “standard” construction documents for newly formed residential construction company, including home improvement contracts to comply with California law.

Chris Souder

Prepared the Baseline schedule for the Folsom Dam in which the contractor was awarded the project based on the BEST technical package. Engaged in the design of the company’s formwork for the cast-in-place concrete on site.

Provided estimating services to Kiewit for the bidding of the Bay Bridge Demolition, Phase 1.

Performed P6 scheduling trainings for Otto Construction, Overaa Construction, Ghilotti Bros., Traylor Bros. , and Cushman Contracting.

Taught at the Carpenters Union Training in Las Vegas, NV. Subjects covered were estimating/budgeting, scheduling and soft skills.

Objective

4.2 Each full time tenure track faculty member will annually disseminate newly acquired professional information to all other full time faculty members.

Measure(s)

• Require and analyze a report by each full time tenure track faculty as to professional experiences/engagements.

Analysis

4.2 Objective met. See Table below.

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Each full time tenure track faculty member will annually disseminate newly acquired professional information to all other full time faculty members.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joel Arthur</td>
<td>As chair of the Construction Management Department, routinely disseminated information, to the faculty via department meetings and email that has been acquired at both College level and University level chair's meetings.</td>
</tr>
<tr>
<td>Michael Borzage</td>
<td>Maintained and updated the Department Website.</td>
</tr>
<tr>
<td>Lori Brown</td>
<td>Attended the ACCE Mid-Year and Annual Conference and shared information with the faculty at Department meetings.</td>
</tr>
<tr>
<td>Faculty</td>
<td>Activities</td>
</tr>
<tr>
<td>--------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Denny Gier</td>
<td>Wrote and published the following professional paper entitled, &quot;Integrating Building Information Modeling (BIM) into Core Courses within a Curriculum: A Case Study,&quot; in a peer-reviewed journal, i.e. The International Journal of Engineering Research and General Science, Vol. 3, Issue 1, January-February 2015.</td>
</tr>
<tr>
<td>Richard Holman</td>
<td>Participated in discussions and helped faculty coaches with the ASC Regions 6 &amp; 7 Student Competition teams.</td>
</tr>
<tr>
<td>Willem Kymmell</td>
<td>Participation in department faculty meetings and availability to help other faculty integrate BIM practices into their courses.</td>
</tr>
<tr>
<td>John Schwarz</td>
<td>Attended ACCE Conference in February 2015 in Long Beach, California (various seminars on the new ACCE Standards). Provided information and documents to faculty and utilized information for preparation of self-study report.</td>
</tr>
<tr>
<td>Chris Souder</td>
<td>Published a 13 chapter (429 page) text book entitled “Temporary Structure Design” that is being used in CMGT 440. Written and presented two papers at this year’s 2015 ASC International Conference. The subjects were Faculty Demographics in CM programs in the US and The use of Electronic Plan tables in Design Build Construction. Joined the United Contractors Organization this year. Will be doing trainings for their members. Reorganized our Industry Advisory Council and industry partner’s participation. Organized seventy-one (71) member companies, set up five sub committees, and conducted two meetings per year (one per semester). In the process launched a new fundraising model that will fuel the CMGT department’s future vision.</td>
</tr>
</tbody>
</table>

Objective
4.3 Each full time tenure track faculty member will be an active member of at least one local, state or national professional organization related to the field of construction education and/or management.

Measure(s)
- Require and analyze a report by each full time tenure track faculty as to professional experiences/engagements.

Analysis
4.3 Objective met. See Table below.

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Active member of at least one professional organization related to the field of construction education and/or management.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joel Arthur</td>
<td>Member of the Associated Schools of Construction, Sigma Lambda Chi Construction Management Honor Society IOTA IV Chapter, and Tau Beta Pi, Engineering Honor Society.</td>
</tr>
<tr>
<td>Michael Borzage</td>
<td>License in General Construction (317222) License in Architecture (8975).</td>
</tr>
</tbody>
</table>
### Objective

4.4 Funds will be made available, upon request or by application, for faculty "updating" experiences at a minimum of $1,000 per full time faculty member each academic year.

#### Measure(s)

- Require and analyze a report by each full time tenure track faculty as to professional experiences/engagements.

### Analysis

4.4 All faculty were allocated $800 in professional development funds from the College. Faculty requesting support for travel to conferences, workshops, and other related activities were routinely granted. This objective has been met. See Table Below:

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Travel - AY 2014-15</th>
<th>Total Allocated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joel Arthur</td>
<td>ASC Regions 6 &amp; 7 Student Competition</td>
<td>$494</td>
</tr>
<tr>
<td></td>
<td>Tiny House Workshop</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CEA Grant Presentation</td>
<td></td>
</tr>
<tr>
<td>Lori Brown</td>
<td>MEAC</td>
<td>$5580</td>
</tr>
<tr>
<td></td>
<td>ASC International Conference</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USGBC GreenBuild Conference</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ASC Board of Directors Meeting</td>
<td></td>
</tr>
<tr>
<td>Denny Gier</td>
<td>Faculty Internship</td>
<td>$1475</td>
</tr>
<tr>
<td>Name</td>
<td>Event Description</td>
<td>Amount</td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Willem Kymmell</td>
<td>Mentor Program Stanford University, Design Build Conference, Design Build Team Tour, ASC Regions 6 &amp; 7 Student Competition</td>
<td>$3959</td>
</tr>
<tr>
<td>John Schwarz</td>
<td>ACCE Mid-Year Conference</td>
<td>$1395</td>
</tr>
<tr>
<td>Chris Souder</td>
<td>ASC Regions 6 &amp; 7 Student Competition, ASC International Conference, Conference Paper Presentation</td>
<td>$2488</td>
</tr>
</tbody>
</table>
GOAL 5. Maintain an atmosphere for students emphasizing involvement and collegiality.

Objective

5.1 At least one active student club/organization will be maintained which organizes at least four group experiences for Program majors every year.

Measure(s):
- Require and analyze a report by the Student Clubs and Organizations Committee which describes student club and organization experiences.

Analysis

5.1 This objective has been met. See Report, Section 5.1.8.2

Objective

5.2 Course work will incorporate group or team experiences when appropriate.

Measure(s)
- Require and analyze a report by each full time tenure track faculty as to the use/incorporation of group or team experiences.

Analysis

5.2 Satisfaction of SLO 9 “Apply construction management skills as an effective member of a multi-disciplinary team” establishes that this objective has been met. See SLO 9 binder in the Department office.

Objective

5.3 At least three teams of students will be sent to the ASC Region 7 Construction Management competition every year.

Measure(s)
- Require and analyze a report from the ASC Competition Committee which describes the participation of teams in the ASC Regional Construction Management Competition.

Analysis

5.3 The Department sent eight teams to the ASC Regions 6 & 7 2014 Student Competition. Pre-Construction placed first, Marine placed third, and Heavy Civil placed third. This objective has been met. See Report, section 5.1.8.1.
GOAL 6. Maintain high curricular rigor and student performance expectation level.

Objective
6.1 Program graduates will be able to satisfy ACCE Student Learning Outcome.
Measure(s):
- Require assessment of Student Learning Outcomes in each course as prescribed by the SLO Mapping Matrix.

Analysis
6.1 Assessment of all 20 SLOs was conducted in the Spring 2015 semester and the results were compiled and submitted in the Supplemental Report. After review of these assessment results and the SLO/CLO mapping matrix for AY 2014-2015, the following revisions are being considered to improve upon the original plan.

1. The taxonomy of all SLO’s is in the process of being re-evaluated in terms of what taxonomy was being assessed and if it was reasonable for the course levels where it was being assessed.
2. Revising of the SLO/CLO mapping and assessment is being considered based upon the sample recently provided by ACCE, to adopt the following designations:
   a. I = introduction of SLO content 
   b. R = reinforcement of SLO content 
   c. DA-1 = direct assessment #1 of SLO content 
   d. DA-2 = direct assessment #2 of SLO content 
   e. IA = indirect assessment
3. CSUC is evaluating the use an exit exam for certain SLO DA-2.
4. The following modifications are being considered for on-going SLO/CLO assessment frequency:
   a. Each DA-1 and DA-2 SLO/CLO assessments will report each semester.
   b. Each course not meeting the SLO target assessment for the prior academic year will be re-assessed each semester until SLO targets are met. At that time, if the unmet assessment designation have been changed to an “I” or “R”, no further assessment testing will be required.

Objective
6.2 The majority of Program seniors will indicate that their expectations regarding curricular rigor were met or exceeded.
Measure(s)
- Senior Exit Survey.
Analysis
6.2 Results of the Senior Exit Surveys (see Supplemental Report) established that this objective has been met.

Objective
6.3 A minimum of 90% of Program seniors will receive employment offers as an entry-level manager from one or more construction companies before or upon graduation.
   Measure(s)
   • Senior Exit Survey.

Analysis
6.3 Results of the Senior Exit Surveys (see Supplemental Report) established that this objective has been met.
GOAL 7. Maintain a high degree of program recognition at the campus, state, and national level.

Objective
7.1 A minimum of two articles /press-releases related to the Program, its faculty, and/or its students, will be published each year.
Measure(s):
• The Public Relations and Website Committee will prepare an annual report.

Analysis
7.1 Public Relations and Web Site Annual Report 2014-15 was prepared and submitted to the Department September 1, 2015. This objective has been met.

Objective
7.2 A Program website will be maintained to meet University and ACCE requirements.
Measure(s)
• The Public Relations and Website Committee will prepare an annual report.

Analysis
7.2 During AY 2014-2015 the Web Site was edited and updated; and these efforts are reflected in the Public Relations and Web Site Annual Report 2014-15. This objective has been met.

Objective
7.3 The Program will be represented by the Program at the regional and national meetings of the ACCE and ASC.
Measure(s)
• Require and analyze a report by each full time tenure track faculty as to professional experiences/engagements as to attendance at regional and national meetings of the ACCE and ASC.

Analysis
7.3 Faculty attended regional and national meetings of ACCE and ASC and shared information with the Department. This objective has been met. See Table below.

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Attendance 2014-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joel Arthur</td>
<td>ASC Region 7 Annual Meeting</td>
</tr>
<tr>
<td>Lori Brown</td>
<td>ACCE Mid-Year and Annual Conference</td>
</tr>
<tr>
<td></td>
<td>ASC Region 7 Annual Meeting</td>
</tr>
<tr>
<td></td>
<td>ASC International Annual Meeting</td>
</tr>
<tr>
<td>Denny Gier</td>
<td>ASC Region 7 Annual Meeting</td>
</tr>
</tbody>
</table>
This Assessment Program will be updated periodically and will represent the collective input from all educational (degree) constituencies.