Department Information

Overview - Directions

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<tr>
<th>Program/Discipline</th>
<th>Date Submitted to Dean (Deadline by 4/27/18)*</th>
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<td>Construction Management and Architecture</td>
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List of Contributors

<table>
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<tr>
<th>Name</th>
<th>Title/Position</th>
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<tbody>
<tr>
<td>Robert Burton Ward</td>
<td>Grant Professor</td>
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<tr>
<td>Parviz Entekhabi</td>
<td>Professor</td>
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Signature of Area Dean/Director

Please type the name of the area Dean/Director and the date they reviewed the rest of the document. They may also use this space to provide optional comments. This question has not been answered yet.
Questions Regarding Degree and Certificate Programs

A.1 Core Outcome I - Completion

Observing the number of students who got Awards in your program(s) using the Program Award Tool, compared to the College historical trends what insights can you share?

Notes: Is your program an awards producer or a “feeder” program? If you have multiple degrees and/or certificates, please analyze and compare the trends among them.

CMA is new program. No completers to date.

Prior CONS Program:
Number of students in program was 11 students.
Median time to degree was 2.8 years taking 62.0 units.

Prior DRA Program:
Number of students in program was 11 students.
Median time to degree was 8.0 years taking 89.5 units.

How do you inform potential students about your program? How do students know which courses they should take for your program and in what sequence?

New CMA Program web-site will present
- degree requirements displayed in HC catalog.
- course flow-chart to degree for both CM emphasis and Arch emphasis.
- promotional brochure distributed to secondary educational institutions.
- outreach projects to community service organizations.
- outreach to industry employers thru advisory committee.
- coordination with HC counseling staff.

A.2 Core Outcome II - Time and Units to Completion
Observing the Time & Units data, what insights do you get from the data in general?
As of April 1 2018, no data relating to completion of the new CMA program exists.

Observing the Subject Analysis tool, and focusing on the percentage of capacity of your program, is the college offering enough sections or too many sections of the courses in your program?
As of April 1 2018, number of enrolled students falls below capacity of the program. Student completion of proposed degree program courses is presently limited by low relatively low numbers of students enrolling in course offerings.

Does the way the courses in your degree and certificate program are scheduled enable students to take courses when they need them, plan their lives around their classes from one term to the next, and complete their program on time? If it does not, are there any obvious fixes?
CMA program courses have been structured so as to eliminate prerequisites, and faculty promotes offering all degree required course over a two year period to allow students to plan completion of degree requirements in as short as possible time frame.

How do you work with underprepared students? How do you share the educational resources that are available on campus with all your students? Please give examples of when these resources have worked well and when they have not.
CMA courses have no prerequisites precisely in order to accommodate underprepared students. Course presentation of instructional materials are structured to include necessary foundational material necessary to best support success of underprepared students in each course.

A.3 Core Outcome III - Transfer

Observing the number of transfer students from the transfer volume data, what insights do you get from the data in general?
New CMA program no data

What interactions do you have with students about transfer options? Please give examples.
Students regularly seek faculty advise as to transfer opportunities. Faculty regularly advises students regarding transfer questions.

How are program learning outcomes aligned with the skills and knowledge students will need to succeed in transferring to baccalaureate degree programs?
- CMA course SLO’s aligned with comparable CSU lower division courses
- CMA Program Learning Outcomes (PLO’s) modeled and matched to CSU Construction Management and Architecture degree PLO’s.
- Faculty has participated in California Community College Academic Senate Faculty Discipline Review Group (FDRG) activities, and now currently leads FDRG in definition of Civil and Construction Management CID No. 0957.00 curriculum and course descriptors.

A.4 Core Outcome IV - Employment

Observing the Employment data, what insights do you get from the data in general?
Strong employment demand for construction industry employment in Monterey County.

Incredibly strong construction industry employment demand has developed in neighboring South San Francisco Bay area in Silicon Valley

Incredibly strong construction industry employment demand has developed in North San Francisco Bay as result of wildland fires.

Chancellor’s Office has officially awarded Bronz Star for increased earnings outcome in architectural drafting technology segment of CMA program (March 29, 2018 Letter from California Community College Chancellor’s Office, Van Ton-Quinlivan, Executive Vice Chancellor, Workforce and Digital Futures)

How and when do you inform students about prospective employment opportunities?
Faculty receives inquiries on a regular basis from industry contacts, and students are directly referred to industry employer.
College now has an internship office and faculty is coordinating student inter placement.
College has unfulfilled need of placement officer.

How are program learning outcomes aligned with the skills and knowledge students will need to succeed in their future employment?

Construction Management Emphasis:
As stated program outcomes are directly aligned with industry needs:

- identify and select alternate construction education pathways and construction career opportunities.
- apply basic levels of knowledge and experience in construction craft skills and commercial business operations necessary to effectively manage small commercial and residential construction project activities.
  - analyze and comprehend standard construction contract terms, conditions, plans, specifications, costing formats, and basic regulatory requirements applicable to a range of construction activities.
  - apply basic construction management methods to monitor and control compliance with contract requirements for price, time schedule, specifications, and safety on small projects.

Architecture Emphasis:
As stated program outcomes are directly aligned both for industry needs and transfer requirements to CSU institutions for professional baccalaureate degree programs:

- identify and select alternate architectural education pathways and architectural career opportunities.
• apply basic principles of commercial and residential construction materials and methods to architectural design.
• apply basic architectural design principles.
• describe and apply sustainable environmental design principles.
• apply manual and computer-aided visual communication skills.

A.5 - Recommendations

Reflecting on your observations and analysis from A.1 through A.4, what recommendations do you have for your program?

Quote From 2017 PPA:

Over-Reaching Summary Goal: Increasing CMA Program Student Enrollment and No. of Completers

Strategic Objectives: Funding for

1st Priority: Employment of Construction Laboratory Instructional Assistant/Technician

2nd Priority: Acquisition of Technical Tools and Equipment to Support CMA Courses and Implementing Tools/Equipment Inventory Tracking/Maintenance System

3rd Priority: Staffing Existing Vacant Missing Full-Time Tenure Track Faculty Position

4th Priority: Printing CMA Program Informational Materials to Support Faculty Efforts to Increase Enrollment and Certificate & Degree Completers

5th Priority: Create and Implement CMA Major Student Tracking Spreadsheet to Trace Student Success a.) Academics at Hartnell b.) Career Placement c.) CSU Transfers

6th Priority: Acheive Associated General Contractors of America (AGC) Recognition of CMA Certificate of Achievment

7th Priority: Acheive American Council for Construction Education (ACCE) Accreditation for CMA Associate of Science Degree

8th Priority: Faculty professional Development

Informational Supplement

Laboratory Technician job description:

CLASS TITLE: INSTRUCTIONAL ASSOCIATE II Construction Management and Architecture JOB DESCRIPTION:

Under the direction of the Dean of Advanced Technology:

• Control, inventory, and maintain tools, supplies, and materials for Construction Management and Architecture courses and Maker Space program activities in the instructional lab facilities located in AC-D109, 110, 111, 112;
• Assist Hartnell students with technical instructions on proper use of power equipment and tools
• Monitor public visitors utilizing the Maker Space lab facilities, equipment and tools for safe, efficient use of facilities, tools, and equipment.

REPRESENTATIVE DUTIES:

• Prepare and issue supplies, equipment, materials, and tools in and out to students and instructors while maintaining appropriate usage records;

• Plan public labs for Maker Space public use program;
• Prepare and set up materials and equipment for lab procedures and demonstrations;
• Demobilize lab set-ups, demonstrations, and procedures
• maintain and clean labs, equipment and tool;
• Assure proper storage and track usage of equipment and tools;
• Assist instructors, students, and public visitors in the safe and proper use and care of equipment, tools, and instruments:
  • report and coordinate major repairs and maintenance of lab equipment and tools to assure safe and proper operation;
  • calibrate, adjust, maintain, inspect, troubleshoot and perform routine maintenance and minor repair to equipment and tools; troubleshoot and repair small power tools and
  • communicate and maintain records with vendors regarding necessary purchases of materials, supplies, maintenance, and repairs to equipment and tools.

REQUIRED KNOWLEDGE AND ABILITIES:

• Technical knowledge and experience in operation, uses, care, calibration, repair and maintenance of
• Knowledge and experience in inventory methods, procedures and record-keeping;
• Proper methods of storing equipment, materials and supplies.

EDUCATION AND EXPERIENCE:
Any combination of education and experience equivalent to

• graduation from high school,
• one year basic inventory and record-keeping experience working with construction and computer controlled equipment and tools.

LICENSES AND CERTIFICATIONS:
Valid California driver's license

Reflecting on your observations and analysis from A.1 through A.4, what commendations do you have for your program?

Administrative support from Hartnell College Academic Affairs for the program revitalization of CONS and DRAFTING has been lacking in several key areas and has failed to address important practical priorities for the CMA program urged previously by faculty.

Most notably:
1. Failure to replace tenure faculty position upon retirement of previous instructor. This failure was noted previously by prior Dean of Advanced Technology.
2. Failure to support faculty efforts for security, tracking, and loss prevention regards tools and equipment utilized by CMA faculty and students in laboratory classes.
3. Low priority given to Academic Affairs administrative processing of Revised CMA Curriculum Course and Degree materials, through BACCC and Chancellor's Office which had been generated by faculty with great personal sacrifice.
Questions About Previous Activities

B - Questions About Previous Activities

Evaluate the success of each completed activity in Section D.1 (Previously Scheduled Activities) from your Spring 2017 PPA. What measurable outcomes were achieved? Did the activities and subsequent dialog lead to significant change in student learning or program success? Drafting Technology and Sustainable Construction programs have combined to create a new AS degree in “Construction Management and Architecture”. We have already completed the development of a new degree program and we are currently offering the courses in under the new title CMA.

Local industry support for the new program has been enthusiastic with marked increases in enrollment.

<table>
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<th>D.2 PREVIOUSLY SCHEDULED ACTIVITIES</th>
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CMA Program Objectives:
A. Secure Curriculum Committee Approval and Chancellor's Office Approvals for New Associate Degree
   i. Completion of all proposed course revisions
   ii. Complete creation of all proposed new courses
   iii. Formal approval of proposed degree
   iv. Publish course program and degree pathways and requirements in Hartnell College 2017-2018 Catalog
B. Secure necessary Hartnell College resources for Revitalization
   i. Recruit necessary faculty
   ii. Build necessary funding of program
      iii. Build enrollment
      iv. Devise and implement system to track and measure Student Success in
         a. Employment
         b. Certificate/Module Completion
         c. Transfers to CSU Bachelor programs
C. Strengthen alliances with construction industry
D. Build articulation agreements with leading CSU institutions
   - Cal Poly San Luis Obispo
   - Fresno State University
E. Develop Construction Management program accreditation with ACCE (national accreditation body)
   i. Assess Hartnell College Construction Management program relative to ACCE standards
   ii. Identification of deficiencies in program for achievement of ACCE accreditation
   iii. Secure resources necessary to achieve ACCE accreditation
   iv. Comply with ACCE accreditation standards
F. Develop alliances with advanced construction technology companies
   i. Secure free access to advanced software licenses for student course use courses of study to advance construction program
G. Devise practical basic craft skill training program for students in cooperation with union craft program opportunities

CMA Program Objectives:

Summary Status of Previously Scheduled Activities
A. Secure Curriculum Committee Approval and Chancellor’s Office Approvals for New Associate Degree
   i. Completion of all proposed course revisions
   ii. Complete creation of all proposed new courses
      iii. Formal approval of proposed degree
      iv. Publish course program and degree pathways and requirements in Hartnell College 2017-2018 Catalog

- Degree and course materials submitted to BACCC and Chancellor’s Office for Approval
  - Review comments received back from Chancellor’s Office.
  - Information provided by faculty to Hartnell Academic Affairs for response to Chancellor’s Office review comments

- Academic Affairs response to Chancellor’s Office review comments hindered by work load on Curriculum and Scheduling staff
  - Faculty working to avoid omission of CMA Associates Degree course requirements from 2018-19 Catalog

B. Secure necessary Hartnell College resources for Revitalization
   i. Recruit necessary faculty

   - Academic Affairs has not replaced prior CONS tenured faculty position funding or recruitment
   - Academic Affairs has not funded or recruited laboratory technician necessary for CMA field construction classes

ii. Build necessary funding of program
   iii. Build enrollment

   - Published and distributed to community CMA program promotional literature
   - Course enrollment and retention has improved - data not yet available

   iv. Devise and implement system to track and measure Student Success
Not yet implemented

a. Employment

- College informational data specialist now in place to track

b. Certificate/Module Completion

- In progress

  c. Transfers to CSU Bachelor programs

- Transfer applications by students have been successful
- College informational data specialist now in place to track

C. Strengthen alliances with construction industry

- Faculty active membership in Central Coast Builders Association
- Faculty active member in American Institute of Architects local chapter
- Faculty provides industry organization training seminars

D. Build articulation agreements with leading CSU institutions

- Cal Poly San Luis Obispo
- Fresno State University

- Continuing and Expanding with support of Hartnell Articulation Counselor

E. Develop Construction Management program accreditation with ACCE (national accreditation body)

  i. Assess Hartnell College Construction Management program relative to ACCE standards
  ii. Identification of deficiencies in program for achievement of ACCE accreditation
  iii. Secure resources necessary to achieve ACCE accreditation
  iv. Comply with ACCE accreditation standards

  - In progress

F. Develop alliances with advanced construction technology companies

  i. Secure free access to advanced software licenses for student course use courses of study to advance construction program

  - In progress

G. Devise practical basic craft skill training program for students in cooperation with union craft program opportunities

  - Not yet achieved