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Construction Project Management Assessment Implementation Plan
Updated November 26, 2022

Mission Statement:
The mission of Dunwoody College of Technology's Construction Management programs to accomplish the following:

- Develop leaders in the field of construction with technical competence and an awareness of emerging issues that impact the design and construction industry.
- Engage students through industry partnerships, service learning, and hands on real-world projects.
- Provide instruction by practicing professionals and experienced educators to establish a strong connection between curriculum and industry application.

Degree Program Objectives:

- Organic Growth
  - Increase program size to 200 students in the three Construction Management academic areas (certificate, AAs, +2) by 2027
  - ACCE accreditation for all CM curriculum by Fall 2023
- Innovative Growth
  - 30% women, 25% BIPOC, 35% veteran by 2027
  - Create a "Kate's Club" for young women and gender expansive construction day camp by that grows to 100 participants by 2026
  - Create a technically focused travel study by 2025
  - Increase involvement in Pathways 2 Careers (P2C) by 2023
- Partnership Development and Management
  - Increase IAB/PAC involvement to 30 active members with developed subcommittees for curriculum, mentorship, and classroom involvement by 2025
  - Alumni involvement in PAC to 30% by 2024
  - Increase residential PAC participation to 20% by 2025
  - Construction Sciences and Business partnership
    - Create co-curricular experiences by cross training faculty and sharing courses by 2023
    - Utilize internal Crosby fellowship to develop a new course around composite materials by spring 2023
  - Partner with School of Design to create
    - Design Build competition day by fall 2024
    - Service learning project (like tiny house or fish house) by 2024
  - Work with residential construction companies
    - Volunteer opportunities with students and companies beginning in fall 2022
    - Increase presence at Career Fairs to 15% residential by fall 2023
    - 4 guest speakers and site visits with residential focus over academic year 2022-2023
- Technology to Drive Success
  - Map all curriculum and how it relates to each other by Spring 2023
  - Develop a standard for the Canvas LMS by Fall 2023
  - Incorporate faculty-led initiatives into curriculum

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Assessment Tool 1: Program Objectives

Program Objective	Frequency assessed	Source of data	Results	Action taken
Increase program size to 200 students in the three Construction Management academic areas (certificate, AAs, +2) by 2027	Yearly	Enrollment reports	AY20-21 enrollment = 91 AY21-22 enrollment = 101 AY22-23 enrollment = 122	Continue to work with marketing to highlight programs Develop non matriculating opportunities through a pilot partnership with a GC High school site visits
ACCE accreditation for all CM curriculum by Fall 2023	Yearly	ACCE	AAS program achieved ACCE accreditation in July 2022; Site visit for BS scheduled for March 2023	Complete site visit and any follow up actions from visiting team. Submit required reporting.
30% women, 25% BIPOC, 35% veteran by 2027	Yearly	Enrollment reports	AY22-23 enrollment: Women 16% BIPOC 20% Veteran 16%	Continue working with WITC and P2C in outreach Have 2 meetings with VA office 2 inner city high school site visits / year
Program Objective	Frequency assessed	Source of data	Results	Action taken
Create a “Kate’s Club” for young women and gender expansive construction day camp by that grows to 100 participants by 2026	Yearly	Event participants	Design-Build summer camp scheduled on campus for August 2023 with a goal of 40 participants	Planning for camp began in September 2022
Create a technically focused travel study by 2025	Yearly	Course launch and student participation	HELP grant awarded in October 2023 to begin process	Created travel study course; beginning curriculum development
Increase involvement in Pathways 2 Careers (P2C) by 2023	Yearly	P2C annual report	CMGT hosted 1 day of P2C events	Work more closely with Augustine and Bayza to develop a multi-day experience
Increase IAB/PAC involvement to 30 active members with developed subcommittees for curriculum, mentorship, and classroom involvement by 2025	2x yearly	PAC participant list, meeting notes	Current participation is approximately 25 members, with more coming on board	Continue outreach for PAC in partnership with PAC chairs
Alumni involvement in PAC to 30% by 2024	Yearly	PAC participant list	We have achieved this	Continue to foster relationships with alumni
Increase residential PAC participation to 20% by 2025	Yearly	PAC participant list	Current residential participation is approximately 8%	More outreach to BAM and residential companies
Construction Sciences and Business partnership: • Create co-curricular experiences by cross training faculty and sharing courses by 2023	Yearly	Courses created and taught	HELP grant awarded in October 2023 to begin process	January 2023 begin curriculum development; course forms have been submitted
Construction Sciences and Business partnership • Utilize internal Crosby fellowship to develop a new course around composite materials by spring 2023	Yearly	Course launch and student participation	Course launched in Fall 2022 with 5 students enrolled	Submit a conference speaking prospectus to share experience
Partner with School of Design to create: • Design Build competition day by fall 2024	Yearly	Event hosted		
Partner with School of Design to create: • Service learning project (like tiny house or fish house) by 2024	Yearly	Event hosted		
Work with residential construction companies: • Volunteer opportunities with students and companies beginning in fall 2022	Yearly	Student RSVPS		
Work with residential construction companies: • Increase presence at Career Fairs to 15% residential by fall 2023	Yearly	Career fair attendee list	We did not meet this objective	Continue outreach to BAM, Housing First
Work with residential construction companies: • 4 guest speakers and site visits with residential focus over academic year 2022-2023	Yearly	Student RSVP’s	Still in progress	
Technology to Drive Success: • Map all curriculum and how it relates to each other by Spring 2023	Each semester	Posted curriculum map for faculty	In progress	Original version sent out to team, but changes need to be made
Technology to Drive Success: • Develop a standard for the Canvas LMS by Fall 2023	Yearly	Canvas page posted	In progress	Create an ad hoc group to develop this
Technology to Drive Success: • Incorporate faculty-led initiatives into curriculum	Every semester	Courses launched	In progress	Host curriculum development sessions

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Assessment Tool 2: Student Learning Outcomes

Benchmark: 70% of students achieve 75% or more on each Student Learning Outcome (SLO).

SLO # (BS SLO / AAS SLO)	Course & assignment assessed	Frequency Assessed:	Next assessment scheduled	Assessment Method (direct/indirect)	Results	Action taken	Implementation / Follow up Date	Notes
1 / 1a. Create written communications appropriate to the construction discipline.	CMGT2230: RFI #7 and 8	Spring 2022	Spring 2025	Direct		Revise to be individual assignment:	Assignment was done as a group project and will be revised for Spring 2022 as individual assignment:	Updated this SLO for assessment in CMGT2230 in Spring 2022.
	CSBT1000: Cover Letter Assignment	Fall 2020	Fall 2023	Direct	Average score for the assignment was 76.47%	Modify syllabus to require completion of all summative assignments. Determine engagement for students not completing assignment.		Calculation for the average score included students not submitting the assignment.
2 / 1b. Create oral presentations appropriate to the construction discipline.	CMGT1111: Assignment 7.1 Video Assignment	Fall 2020	Fall 2023	Direct	Average score for the assignment was 98%	Revise rubric to assess finer gradations of performance. Determine engagement for students not completing assignment		Scores for students who did not complete the assignment were removed from calculation.
	CMGT2230: Assignment PRES 01	Spring 2020	Spring 2023	Direct	Average score for the assignment was 88%	Modify assignment to separate individual oral presentations from team presentation. Base assessment clearly on individual performance.		Individual assessment was revised for Spring 2021 class.
3 / 11. Create a construction safety plan.	CMGT2131: Assignment 2 - Falls	Spring 2021	Spring 2024	Direct	5 out of 6 students earned higher than 70% on this assignment.	Assignment needs revisions to better clarify expectations and final product	Revise assignment with new title, clarifications on addressing hazards and place later in the semester.	
	CMGT2230: Test 06B Safety - Essay	Spring 2020	Spring 2023	Direct	91% of students earned an average of 97% on this question	This needs to be moved to CMGT2131 or CMGT2132	Revise safety course to incorporate creation of a safety plan	Need to confirm there are two options to assess safety plans in CMGT2131/2132
4 / 2. Create construction project cost estimates.	CMGT1211: Assignment A.W4	Fall 2020	Fall 2023	Direct	Average score for the assignment was 74.6%	Provide and present an example of estimating concrete that can be presented online or face to face.		Re-assess SLO after Spring 2023
	CMGT2150: Assignment P.W4	Fall 2020	Fall 2023	Direct	Average score for the assignment was 80%, but only 60% of students earned this average	Add an additional unit on estimating protocol and provide an example of a final estimate that meets the scope of the assignment specifications.		Revisit this course after Fall 2022

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SLO #	Course & assignment assessed	Frequency Assessed:	Next assessment scheduled	Assessment Method (direct/indirect)	Results	Action taken	Implementation / Follow up Date	Notes
5 / 3. Create construction project schedules.	CMGT2150: Assignment P.W5	Fall 2020	Fall 2023	Direct	47.4% of students scored more than 75% on the assignment.	Demonstrate Microsoft Project and provide an example of final schedule to meet the scope of the assignment requirements		
	CMGT1231: Week 14&15 A Worksheet	Fall 2020	Fall 2023	Direct	88% of students achieved 85% or higher on the assignment.	Add in multiple projects with varying schedules and simulate a CM bullpen environment to assess critical thinking.		
6 / 8. Analyze ethical decisions based on legal principles	CMGT2150: Final project proposal	Fall 2021	Fall 2021	Direct	94% of students scored more than or equal to 75%	Incorporate more specific formative activity related to ethics in residential construction and		
	CMGT2230: Test12C Ethics Essay Question 1	Spring 2022	Spring 2023	Direct	82% of students earned an average score of 87%	No action for this assessment tool	Further develop this SLO through small group discussion and oral presentation	
7 / 5. Understand the legal implications of contract, common, and regulatory law to manage a construction project.	CMGT1313: Final exam	Fall 2021	Fall 2023	Direct	10/10 students got 100%	No revisions proposed to curriculum at this time	Updated academic plan based on PAC feedback	
	CMGT2221: Final exam	Fall 2021	Fall 2023	Direct	Average 90% score for students	No revisions proposed to curriculum at this time	Updated academic plan based on PAC feedback	
8 / 10. Analyze methods, materials and equipment used to construct projects.	CMGT1221: Assignment question	Spring 2020	Spring 2023	Direct	71% of students answered this question correctly	No immediate action taken	Continue monitoring this question type to gauge effectiveness	
	CMGT1131: Assignment B.W6 Masonry Brick	Fall 2020	Fall 2023	Direct	73% of students earned an average score of 79.9%	No immediate action taken		
9. Apply construction management skills as part of a multi-disciplinary team.	CMGT4501: Sales & Marketing Strategy	Fall 2021	Fall 2023	Direct	Students scored 100% on the assignment	Develop a new assignment that focuses more clearly on teams	Update for Fall 2023 (when the course next runs)	
	CMGT3111: Assignment 15-02	Spring 2021	Spring 2023	Direct	This assignment needs to be revised to be an individual assignment.	Communicate revisions to faculty	Update for Spring 2023 course	

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SLO #	Course & assignment assessed	Frequency Assessed:	Next assessment scheduled	Assessment Method (direct/indirect)	Results	Action taken	Implementation / Follow up Date	Notes
10 / 4. Apply electronic based technology to manage the construction process.	CMGT2230: Test 02B Question 1	Spring 2020	Spring 2023	Direct	90% of students had an average score of 90%	Create an RFI assignment that requires using an electronic tool like BlueBeam Explore using our ProCore account to have the students earn certificates that demonstrate an understanding of ProCore		
	CSBT1002: Final Project	Fall 2020	Fall 2023	Direct	77% had an average score of 80% or higher	No revisions proposed		
11 / 7. Apply basic surveying techniques for construction layout and control.	SCVL1111: Closing the Horizon	Fall 2019	Fall 2022	Direct	93% of students recorded a score of 75% or more	Revise rubric to better align with industry practices		
	SCVL1111: Survey Techniques	Fall 2019	Fall 2022	Direct	67% of students scored 75% or higher	More instruction and formative assessment on field procedures using total station equipment		
12. Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process.	CMGT1111: Quiz Industry Roles	Spring 2021	Spring 2024	Direct	Average score was 93%	No changes at this time.		
	TBD							
13. Understand construction risk management.	CMGT3130: Final	Spring 2022	Spring 2025	Direct	Average score was 90%	Revisions to course layout, but no major content revisions		
	CMGT3130: Midterm	Spring 2022	Spring 2025	Direct	Average score was 79%	Revisions to course layout, but no major content revisions		
14 / 6. Understand construction accounting and cost control.	CMGT1211: Final estimating project	Fall 2020	~~Spring 2023~~ Spring 2022	Direct	100% of students earned 75% or higher on the test	Revisit this course after fall 2021 Incorporate an assignment that utilizes monthly pay applications	Revised this SLO with CMGT2230 Pay Application assignment	Revised 2021 Academic Plan to include a business accounting course as preparation for this SLO in CMGT courses
	CMGT2230: Test 10C Project Control – Essay question 1	Spring 2020	Spring 2023	Direct	79% of students earned an average of 84%	No action for the assessment tool	Building a cost loaded schedule and analyzing cash flow could be introduced and assessed	Review with IAB/PAC in spring 2022

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SLO #	Course & assignment assessed	Frequency Assessed:	Next assessment scheduled	Assessment Method (direct/indirect)	Results	Action taken	Implementation / Follow up Date	Notes
15. Understand construction quality assurance and control.	CMGT3130: Quality Control Management Failures	Spring 2022	Spring 2025	Direct	Average score was 76.03%	Criteria was given to the students, but the rubric could be added to Canvas with more detail about each criterion item	Update for Fall 2023 semester when class runs again	
	CMGT3130: Test 3	Spring 2022	Spring 2025	Direct	Average score was 82%		Provide feedback for students to clarify overall scores on each essay question	
16. Understand construction project control processes.	CMGT3211: Midterm	Spring 2022	Spring 2025	Direct	Average score was 82%		Review for updating midterm for Fall 2023 session	
	CMGT3211: final	Spring 2022	Spring 2025	Direct	Average score was 84%		Review for updating midterm for Fall 2023 session	
17. Understand the legal implications of contract, common, and regulatory law to manage a construction project.	CMGT3111: Construction Management case study	Fall 2021	Spring 2023	Direct	Average score is 81%	No changes at this time		
	CMGT2221: Final	Fall 2021	Fall 2024	Direct	Average score was 90$	No changes at this time		
Understand the basic principles of sustainable construction.	CMGT4130	Spring 2022: Quiz 1	Spring 2025	Direct	Average score was 88%	Minor adjustments to concepts covered.	Fall 2022 curriculum	Students were able to retake the quiz to improve their score.
	CMGT4130	Spring 2022: Quiz 3 Energy & Atmosphere & Materials and Resources	Spring 2025	Direct	Average score was 96%	Minor adjustments to concepts covered.	Fall 2022 curriculum	Students were able to retake the quiz to improve their score.
19 / 12. Understand the basic principles of structural behavior.	CMGT2203: Assignment 02	Fall 2020	Fall 2023	Direct	11 out of 12 students earned an average score of 83.8%	Revising to consider a different assignment		
	SCVL2111:	Spring 2020	Spring 2023	Direct	83% of students got the question correct	Include an open ended question instead of multiple choice		
20 / 13. Understand the basic principles of mechanical, electrical, and piping systems.	CMGT1131: midterm exam questions 10,16,18,22,33,38	Fall 2020	Fall 2023	Direct	57% of students scored below 75%	Give students more time to complete the exam and reassess	Internet speeds effect student downloads which impacts a student's ability to complete this	
	CMGT2211: Final test	Spring 2020	Spring 2023	Direct	7 out of 8 students earned an average of 88% on the final	No action needed	No follow up needed	

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Assessment Tool 3: Industry Feedback

Spring 2023
Review 6 courses with PAC annually; 3 for AAS and 3 for +2

Course name	Planned assessment date	Feedback from PAC	Action taken
CMGT4006 Professional Development (KJ)	Friday, February 10th		
CMGT1221 Materials & Methods II (NS/BH)	Friday, March 10th		
CMGT2211: Integrated Environmental Systems (BW/NS)	Friday, April 21st		
CMGT2230 Commercial Capstone (NS)	Friday, June 9th		

Fall 2023
Review 6 courses with PAC annually; 3 for AAS and 3 for +2

Course name	Planned assessment date	Feedback from PAC	Action taken
CSBT1002: Construction Drafting (KJ)	TBD		
CMGT1231 Construction Planning & Scheduling I	TBD		
CMGT3211: Construction Law	TBD		

Spring 2024
Review 6 courses with PAC annually; 3 for AAS and 3 for +2

Course name	Planned assessment date	Feedback from PAC	Action taken
CMGT3211: Construction Accounting & Finance	TBD		
CMGT3221: Construction Planning & Scheduling II	TBD		
SCVL2111: Materials, Testing, Construction Methods	TBD		

PRIOR COURSE Reviews
Fall 2021 Course reviews review 3 courses with PAC annually: 3 for AAS and 3 for +2

Course name	Assessment date	Feedback from PAC	Action taken
CMGT1131: Plans & Measurements	Fall 2021	Overall feedback from the PAC was not to change the structure of the class to be a print reading class and a basic take off. Need to make sure that we are including how a building goes together – better cross curriculum with Drafting.	Implement more software in the class while still utilizing paper methods for hand takeoffs Revise curriculum to incorporate more of the process of how buildings go together
CMGT2203: Construction Management Statics and Structures	Fall 2021	Incorporate specifications in some way – add in discussions about ASTM and ACI Reinforce the importance of this topic in construction management Clarify what ACCE is looking for around load tracing; is it more about load transfers within the building?	Spring 2022: moved this class to second semester Consider how to build on basic materials testing in SCVL2111 Add in load transfers assignment Collaborate with Engineering for shared tutoring

CMGT2221: Construction Administration	Fall 2021	This class currently runs as asynchronous. Why are there so many reflection papers in the class? Enforce procurement and preconstruction – need to clarify the language around the term submittal Look at following the linear timeline of construction Need more around: supply chain, project closeout Work with technology more in this class. Use a real world project where students can talk to the PM and Owner.	Revise assignments to reduce reflection papers Work with industry to simulate a real world project Look at where some of this topic can be covered in other courses to emphasize its importance Consider making this course synchronous

Spring 2022 Course reviews:
Review 3 courses with PAC annually; 3 for AAS and 3 for +2

Course name	Assessment date	Feedback from PAC / IAB	Action taken
CSBT1000: AEC Seminar	April 21st 830-10am	The IAB reaffirmed that the content in this course is appropriate and useful for students. Soft skills exercises are important to remain (IAB meeting notes address feedback in full detail)	For academic plans beginning in Fall 2023, CMGT1111 and CSBT1000 will be combined into a single course. More industry involvement in the course (requesting IAB help in redeveloping it for Fall 2023)
CMGT1111: Construction Industry	May 9th 330-5pm	More technology should be addressed (implement new technology only course for academic plan F23) More roles and responsibilities activities, job titles, career exposure (IAB meeting notes address feedback in full detail)	Removed the "clunky" transitions from project delivery methods and student career opportunities Created a new first semester course to focus on exposing students to basic technology (Xcel, BluBeam, ProCore, etc)
CMGT4501: Capstone	June 27th 8-930a	See meeting notes	

Fall 2022 Course reviews:
Review 6 courses with PAC annually; 3 for AAS and 3 for +2

Course name	Planned assessment date	Feedback from PAC	Action taken
CMGT4130 Green Construction (EB)		Overall, feedback from PAC is the content and structure is appropriate for this course. See meeting notes	Consider how many rating systems exist and addressing what may be the most appropriate overview of rating systems to give students.
CMGT3130 Quality Assurance & Risk (JG/SW)		See meeting notes	
CMGT2211 Integrated Environmental Systems (BW/NS)	NOTE: this review is being rescheduled for Spring 2023		