

College of Continuing & Professional Studies

UNIVERSITY OF MINNESOTA

CONSTRUCTION MANAGEMENT ANNUAL REPORT 2022

APPENDICES

Appendix A: Quality Improvement Plan

Appendix B: Academic Quality Plan

Appendix C: Annual Plan

APPENDIX A

University of Minnesota Construction Management Program Quality Improvement Plan

Academic Year 2021–2022

The University of Minnesota’s reputation as a premier learning institution is well established, both nationally and internationally. The University’s Construction Management program has also acquired an excellent reputation through our commitment to practical, applied instruction. Our program is grounded in current industry practices and technologies. It offers a multidisciplinary approach to the real issues facing construction managers. The program’s Quality Improvement Plan outlines our process for continuous assessment and improvement of the program goals, objectives, curriculum, faculty, and resources.

Overall Program Review

Our staff meets more or less continually to review the overall program goals, objectives, and student learning outcomes. We strive to prepare our students to be future leaders in the industry. Our review includes:

1. An assessment of the program to confirm adherence to ABET outcome-based standards under which we are being accredited separately for both Facility Management and Construction Management
2. A review of current industry trends and needs (at every Advisory Board meeting)
3. Feedback from the Advisory Board (at every Advisory Board meeting)
4. Feedback from faculty (once per semester as a group, then at every course review meeting, and more informally in one-on-one email correspondence)
5. Input and requests from current students (constantly received and discussed among staff)
6. Input from employers (at every Advisory Board meeting, and informally at every Career Fair)
7. Course review data from College of Continuing and Professional Studies Academic Technology and Design (ATD) unit (at every course review)
8. Graduation survey results (University-wide, every year)
9. Student Ratings of Teaching (SRTs) (every semester course offering)
10. Student Focus Groups (by invitation to all prospective graduates, spring every odd year)
11. Industry publications and research (as they occur—rarely, as we are not a research institution)
12. Review of new textbook content and options (staff review for currency, faculty review for relevance)
13. Review of appropriate software developments and updates (continuously)

Our assessment of the Construction Management program is continuous, and broad components are shown in figure 1 below. The tools that are used to evaluate elements of the program are listed below in Table 1.

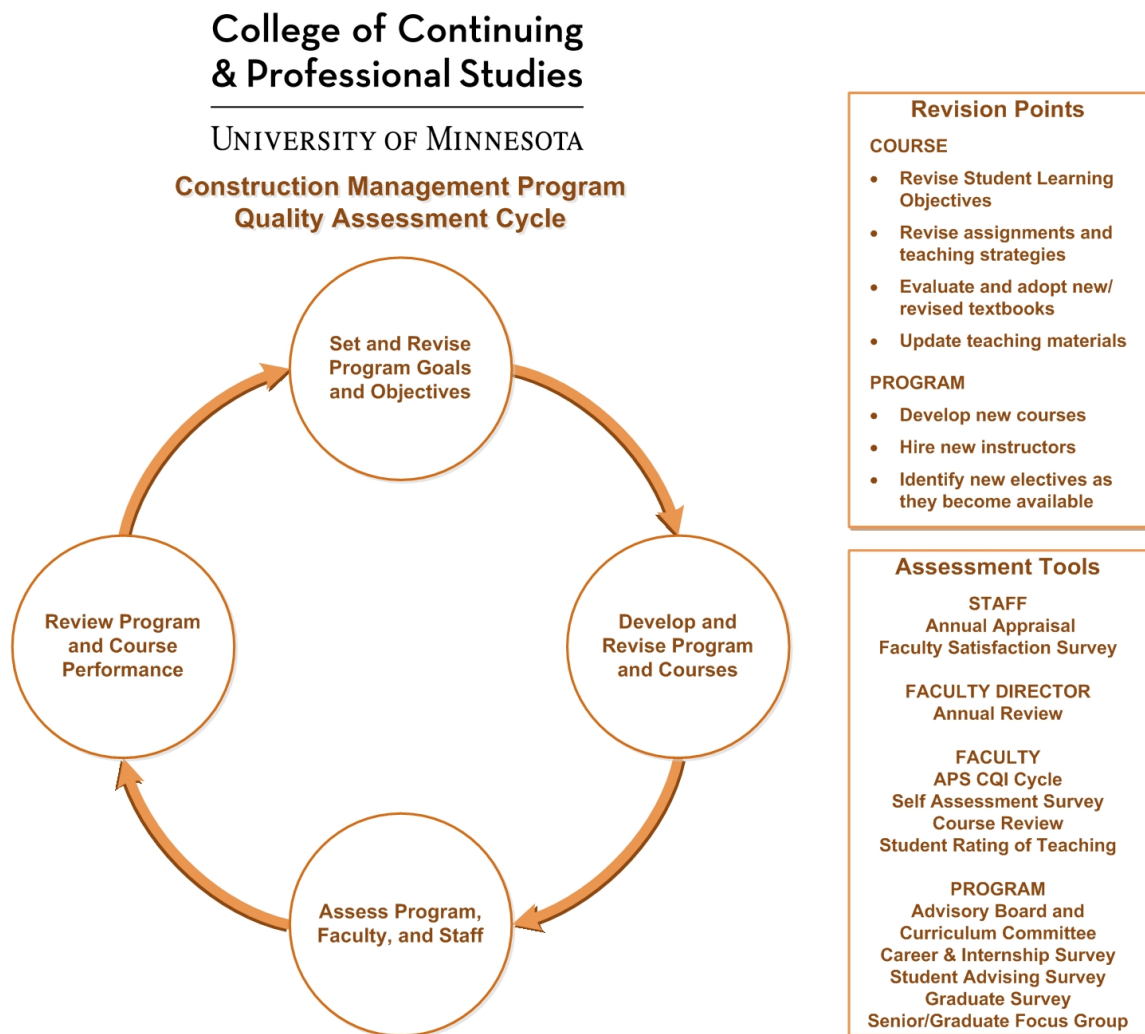


Figure A1. Quality Assessment Cycle

We want our degree program to prepare our students to excel in industry as competent and valuable project team members. We want our curriculum to reflect current technology and industry practices. Our faculty should be accomplished practitioners, working (or having worked) in the industry and providing insight to our students into current practices and tools. And our teaching methods should be the most up to date and effective.

Recommended changes and additions are incorporated into the program Annual Plan, Academic Quality Plan, and individual courses, and these are presented to the Advisory Board for review and comment. This review process uses the ongoing input and feedback we get from students, faculty, our advisory board,

and the College through the assessment methods outlined in the Academic Quality Plan. The overall program is designed to prepare students for work as construction managers. Program courses and course content evolve over time and are added, enhanced, or removed based on industry input. Specific degree requirement changes are presented to and reviewed by our College's Academic Council, prior to approval by the Provost's Office.

Table A1. Program Assessment Tools

Assessment Tool	Frequency	Action	Documentation and Assessment of Effectiveness	Direct or Indirect Assessment	Appendix Reference
Overall program assessment					
Comparison to ABET/FMAC standards	Semiannually	Department review	Required changes are proposed to and approved by the Academic Council.	Direct	none
Student Experience in the Research University (SERU) survey	Biennially or when University implements	Department review	Incorporated into the Annual Report; response as needed.	Direct	A
Advisory Board and curriculum committee meetings	2x/year	Courses modified, added, or removed	Proposals submitted to CCAPS Academic Council; review semiannually by Advisory Board members, and subject to University Curriculum Review committee final approval.	Indirect	none
Student focus groups (by broad invitation)	Solicited every odd year (since we are a two-year advanced standing program)	Minutes taken to record suggestions	Minutes are filed and suggestions are considered for overall program quality improvements. Annual review of progress.	Direct	none
2. Courses					
Faculty course assessment	Each term after a class is taught (online)	Department review, objectives revised, teaching methods and exercises revised,	Formal review process documents that faculty goals were achieved, and courses are updated as suggested.	Direct	B

		new content and activities incorporated, textbook changed			
ATD course review	After each course is taught	Review is provided to each instructor	OES follows up with each instructor to document changes made. Incorporates their own “Quality Matters” review of every course.	Indirect	B
UAPS course review	Every three years for established courses; after each new course is taught for the first time	Course objectives, activities, assessments may be revised, recorded, and filed in course review document	Course review form filed and reviewed after next course delivery with instructor and program directors. Follow-up review after course is taught again to document that changes were made and assess their effectiveness.	Direct	B
Student Ratings of Teaching	After each course section is delivered	Plan developed to address student concerns about faculty or course	Annual review of SRTs by program director. Documentation of SRTs for each faculty and each course are filed and assessed each semester. Student rating of teaching values assessed to determine if trends are positive. If trends are negative, the course and faculty review schedules are accelerated. Faculty progress is monitored, and faculty are replaced if improvements are documented.	Direct	D
3. Students					
Academic Quality Plan	Annually	Varies for each outcome listed	See Academic Quality Plan	Direct/ Indirect	See separate document

Student placement and career services	Annually	Improvements or changes made based on student responses	Placement numbers tracked from year to year. Both student satisfaction and student placement should increase each year.	Direct	C
Student Rating of Teaching	After each course section is delivered	Plan developed to address student concerns about faculty or course	Assessment incorporated into course review. Annual review of SRTs by program director. Documentation of SRTs for each faculty and each course are filed and assessed each semester. Student rating of teaching values assessed to determine if trends are positive. If trends are negative, the review schedule is accelerated. Faculty replaced if improvements are not made.	Direct	D
4. Faculty					
Student Ratings of Teaching	After each course section is delivered	Plan developed to address student concerns about faculty or course	Assessment incorporated into course review. Annual review of SRTs by program director. Documentation of SRTs for each faculty and each course are filed and assessed each semester. Student rating of teaching values assessed to determine if trends are positive. If trends are negative, the review schedule is accelerated. Faculty replaced if improvements are not made.	Direct	D

Faculty self-assessment review	Each term after a class is taught	Department Review	Formal review process documents that faculty goals were achieved, and courses are updated as suggested.	Direct	B
Student Experience in the Research University (SERU) Survey	Biennially or when University implements	Department Review	Incorporated into the Annual Report; response as needed.	Direct	D
Course review/ Performance review (for full-time faculty)	Every three years for adjunct, after first time teaching for new faculty, and annually for full time faculty	Teaching methods revised. Goals set for next year. Employee development plan documented and agreed to by college and employee	Formal review process documents goals that were achieved and allows faculty and supervisors to set new goals. Student rating of teaching values assessed to determine if trends are positive. If trends are negative, the review schedule is accelerated. Faculty replaced if improvements are not made.	Direct	D
5. Staff					
Performance Review	Annually	Employee development plan documented and agreed to by college and employee	Formal review process documents goals that were achieved and allows staff and supervisors to set new goals.	Direct	D
6. Advising					
University Advising Survey	Annually	Advising methods and processes revised	Numerical results tabulated and assessed for positive results and trends.	Direct	E
Student Experience in the Research University (SERU) survey	Biennially or when University implements	Department Review	Incorporated into the Annual Report; response as needed.	Direct	E

Quality Improvement Plan (QIP)
Sub-Appendices

QIP Sub-Appendix A1: Overall Program

QIP Sub-Appendix A2: Courses

QIP Sub-Appendix A3: Students

QIP Sub-Appendix A4: Faculty

QIP Sub-Appendix A5: Advising

QIP Sub-Appendix A1: Overall Program

Student Experience in the Research University Survey

The Student Experience in the Research University (SERU) survey is a comprehensive national survey administered to all undergraduates at the University of Minnesota Twin Cities (UMNTC). The University of Minnesota has participated in the survey since 2009, most recently in 2022. The data are used to provide UMNTC staff, faculty, and administrators with unique insights into students' experiences. Student surveys can be a powerful and cost-effective way to gain insight into the student experience. This survey is offered in most years to all undergraduates and used to gather information about student engagement in activities that have been empirically shown to influence student learning and positive educational outcomes, both inside and outside of the classroom. A benefit of the SERU is that item responses provide actionable information for faculty, staff, and administrators. The responses can also serve as indicators of academic program and institutional effectiveness. SERU results can be viewed across institutions as a way for a college or university to make peer comparisons.

The survey is administered to all degree-seeking University of Minnesota undergraduate students. The items provide a comprehensive snapshot of the student experience, tapping into diverse domains of interest to a variety of campus stakeholders. Some of the items are designed to gather information on academic and civic engagement, student learning and development, student services, and globalization. Students also respond to items that provide insight into their academic and personal development, perceived campus climate for diversity, overall satisfaction, and evaluation of the major (if applicable). Since the survey asks students about their background, beliefs, motivations, and perspectives, it imparts additional understanding into academic and co-curricular engagement (or disengagement). The diversity in responses reveals the student experience through a variety of lenses.

There is also a customizable module available with which colleges and universities can create items that reflect topics and issues of particular interest to them. Finally, SERU items were created to gather information about a specific college student population: students who attend research institutions. Based on the unique context of research universities, a deliberate effort was made to capture the complexity of these institutions. Survey items are designed to allow for analysis at not only the institutional level but also by college and even academic major. Since research universities are often complex organizations, the ability to identify specific areas within the institution can inform targeted self-improvement efforts, as well as provide evidence of quality at various levels.

Results of the SERU survey are used to assess many elements of the Construction Management program.

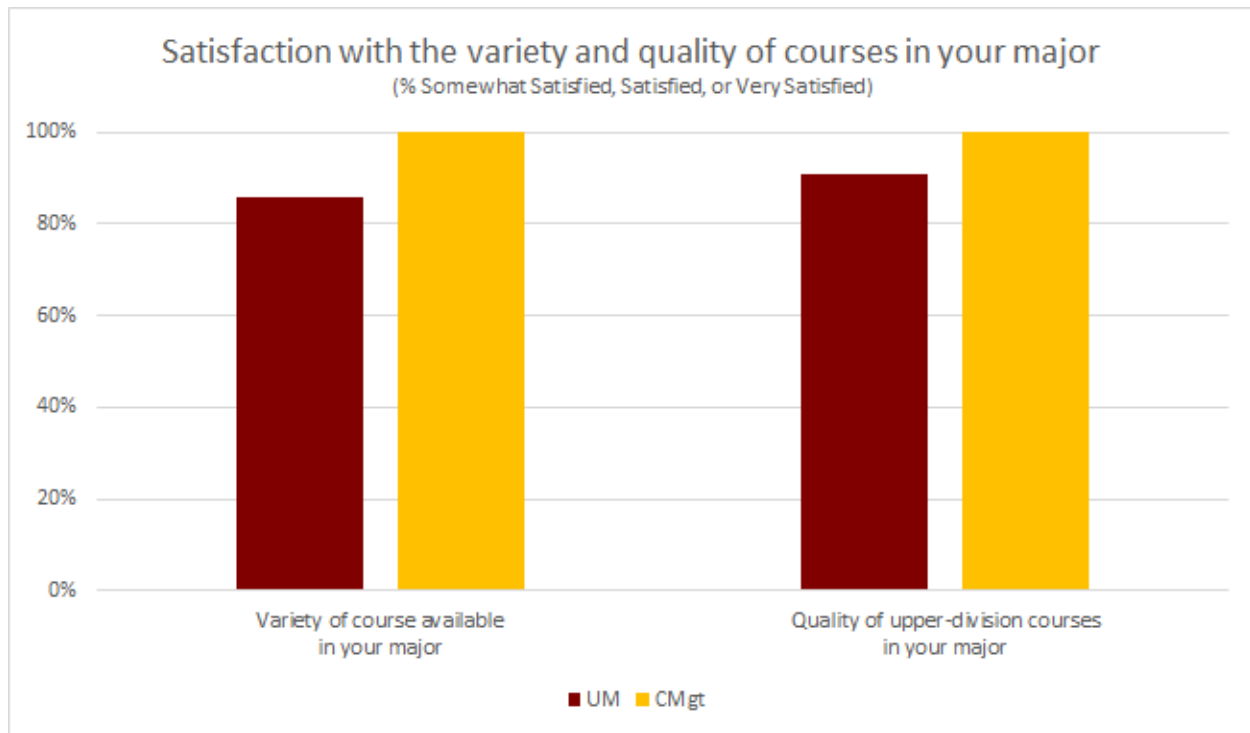


Figure A1.1. Student Satisfaction with Major

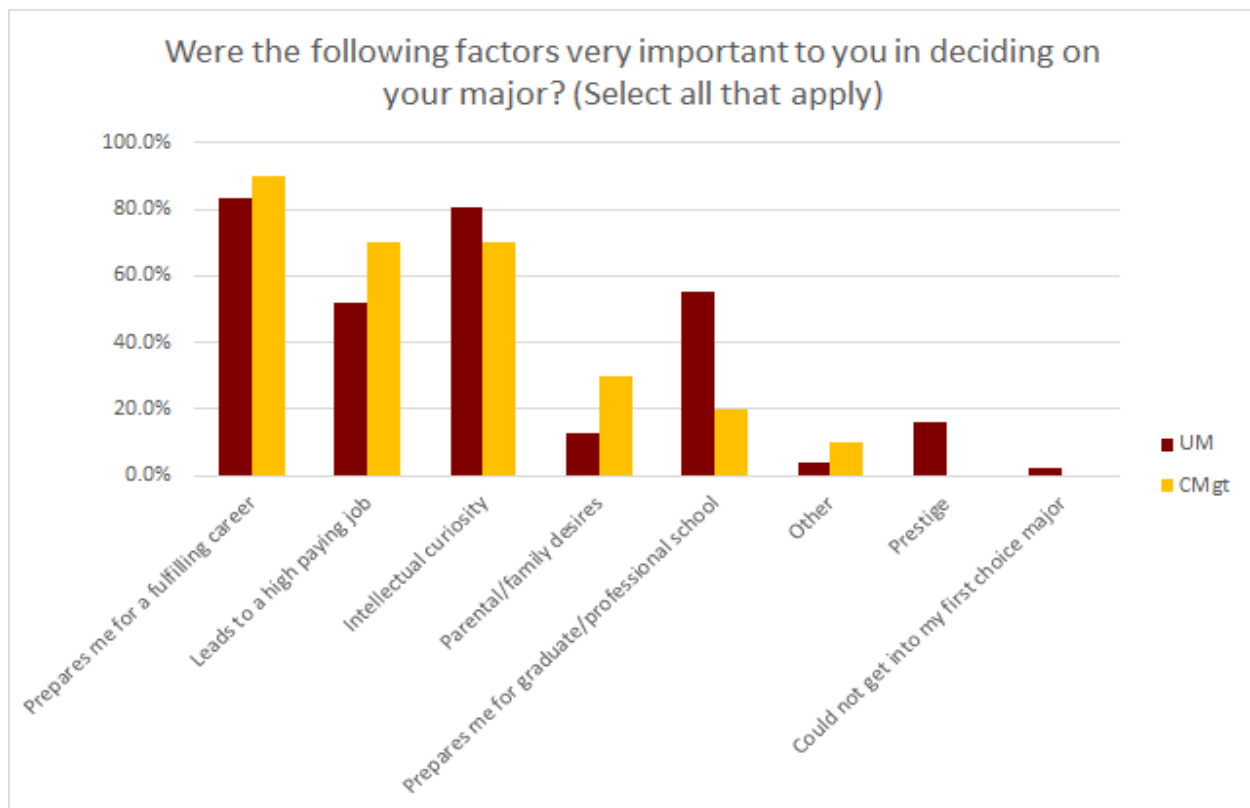


Figure A1.2. Factors Influencing Choice of Major

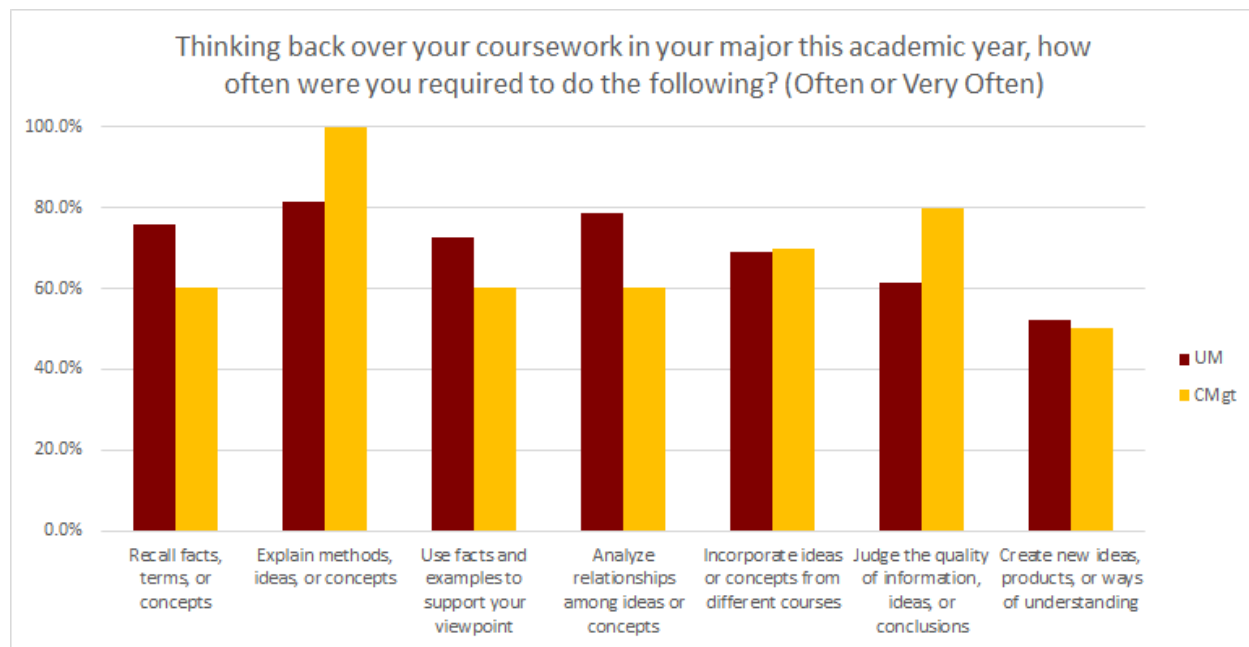


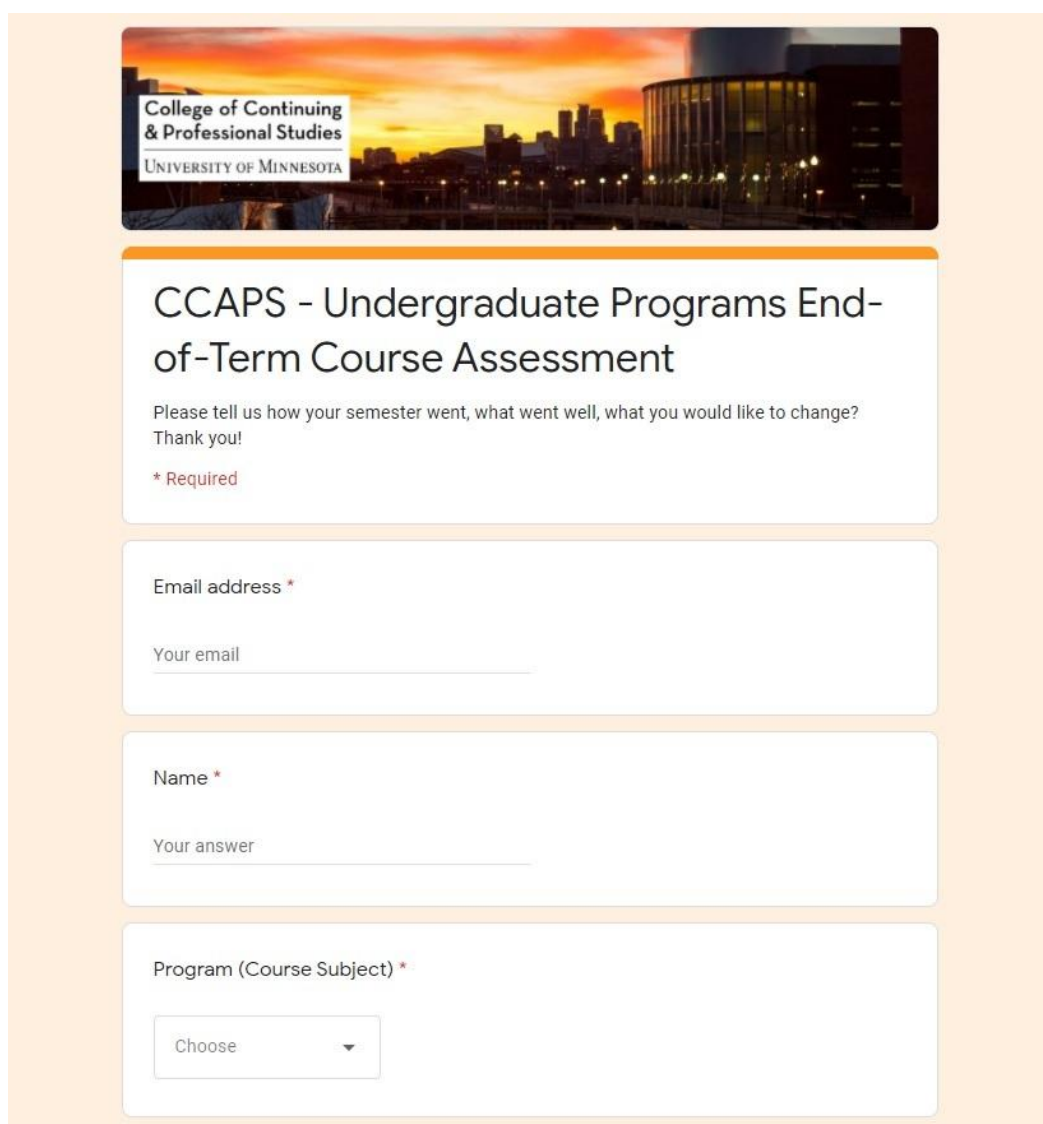
Figure A1.3. Required Effort

QIP Sub-Appendix A2: Courses

Courses are reviewed in a variety of ways each time they are taught.

1. End of Semester Course Assessment

At the end of each semester, all faculty are invited to complete a Course Assessment survey for each class they taught. Through one multiple-choice and four open-ended questions, faculty reflect on their course(s) and successful teaching strategies and identify changes they would like to see in future versions of the course. The assessment also asks what faculty development activities would be useful and how the program can better support their teaching. Copies of the response are emailed to the faculty member and their program director, who may then open a dialogue with the faculty member. Course assessment responses are included in the three-year course reviews.



The screenshot displays a survey form titled "CCAPS - Undergraduate Programs End-of-Term Course Assessment". At the top, there is a banner image of a city skyline at sunset with the text "College of Continuing & Professional Studies" and "UNIVERSITY OF MINNESOTA". Below the banner, the title is followed by a request for feedback: "Please tell us how your semester went, what went well, what you would like to change? Thank you!". A red asterisk indicates that the following fields are required. The form includes three input fields: "Email address", "Name", and "Program (Course Subject)". The "Program (Course Subject)" field is a dropdown menu currently showing "Choose".

College of Continuing & Professional Studies
UNIVERSITY OF MINNESOTA

CCAPS - Undergraduate Programs End-of-Term Course Assessment

Please tell us how your semester went, what went well, what you would like to change?
Thank you!

* Required

Email address *

Your email

Name *

Your answer

Program (Course Subject) *

Choose

Course Number *

Your answer

Term *

Choose

Question 1: How would you rate your satisfaction with teaching this semester?

Low 1 2 3 4 High

Question 2: What teaching strategy or learning activity went particularly well this semester?

Your answer

Question 3: What changes would you like to make to your course, teaching strategies, course materials, or course technology?

Your answer

Question 4: What professional development events or activities would be of interest?

Your answer

Question 5: How can CCAPS better support you in your teaching?

Your answer

Thank you for your response!

Your program director will review your comments and respond via email.

Figure A2.1. End of Semester Course Assessment Survey

Academic Technology and Design (ATD) Course Review

In addition to the instructor's end-of-semester course assessment, the College of Continuing and Professional Studies Academic Technology and Design unit provides a continuous review of all CMGT courses against the following standards:

- [Blended_F2F Course Criteria.pdf](#)
- [Online Course Criteria.pdf](#)
- [Online Teaching Review.pdf](#)

Protocols for reviews:

- [Protocol: Course Review Program Directors](#)
- [Protocol: Course Review Instructional Designers](#)

2. APS Course Review

Each course is reviewed every three years by the program director, faculty directors, and faculty.

Construction Management Course Reviews - Spring 2020 - Spring 2023												
Course Name	CRN	Current Instructors Offered			Spring 2020	Summer 2020	Fall 2020	Spring 2021	Summer 2021	Fall 2021	Spring 2022	Summer 2022
Surveying & Mapping	CE 3202	CEGE 3202	Mavis	As Required	1							
Surveying & Mapping		CMGT 3001W	Dean, Hauser	Su								
Introduction to Construction		CMGT 3011	Cunningham	Sp, F	1							2
Construction Plan Reading		CMGT 3024W	Pliska	Sp, F								
Facility Programming and Design		CMGT 4000	Bowen	F Even Years						1		
The Construction Industry through Time and Tomorrow		CMGT 4001	Hietpas	F Even Years								
Innovative Contracting		CMGT 4002	Gillquist, Lemke	F Odd Years								
Lean Construction		CMGT 4003	Robb	Sp Odd Years			1					
Managing in the BIM Environment		CMGT 4011	Creager	Sp, F	1							1
Construction Documents & Contracts		CMGT 4021	Styrlund	Sp, F	1			1				
Construction Planning and Scheduling		CMGT 4022	Bowman	Sp, F								
Construction Estimating		CMGT 4031	Lopez	Sp, F					2			1
Construction Safety & Loss Control		CMGT 4041W	Hilger	Sp							1	
Specifications and Technical Writing for Construction Professionals		CMGT 4073	Holm	Sp, F								
Building Codes for Construction Managers		CMGT 4081	Chapman	Sp					1			1
Managing Erosion and Sediment Control on Construction Sites		CMGT 4193	Hilger	Sp, F								
Directed Study		CMGT 4196	Hilger	Sp, Su, F								1
Construction Management Internship		CMGT 4201	Elthon	Sp, F	1							
Construction Accounting		CMGT 4215	Linder	Sp								
Facility Quality Assessment and Commissioning		CMGT 4301	Cranston	F Odd Years								
Occupational Health & Safety Principles		CMGT 4302	Schleuning	Sp Even Years								
Environmental Health Principles		CMGT 4303	Carlson	Sp								
Industrial Hygiene Principles		CMGT 4304	Holm	F								
Fire and Life Safety Principles		CMGT 4305	Schleuning	F								
Health and Safety Planning and Management		CMGT 4422	Elthon, Gronvall, Hilg	Sp						2		
Advanced Construction Cost Estimating		CMGT 4471	Becker	F								
Sustainability for Construction Managers		CMGT 4542	Linder	Sp					2			
Building Energy Systems		CMGT 4544	Kuehn	F								
Materials & Structures I		CMGT 4545	Gronvall	Sp			1					
Materials & Structures II		CMGT 4550		Sp								
Topics in Construction Management		CMGT 4562	Rasmussen	Sp								
Building Envelope Design & Construction		CMGT 4861	Hilger	F								
Construction Management Capstone				Sp						2		

Figure A2.2 Course Review Calendar

The following **Figure A2.3** standard form is used to ensure that each course is being updated as needed. Courses are also reviewed in a similar way after they are offered for the first time.

Course:	Review Date:
Reviewers: Instructor, Faculty Director, APS Program Director, OES Instructional Designer	Notes By:
Full Course Review Portfolio Here	
REVIEW NOTES	ACTION ITEMS
Course Outcomes	
General Redesign elements (See also OES Design Meeting Minutes)	
<p>The following are from the OES *Online Course Review</p> <p>Learning Outcomes</p> <p>Learning Activities and Assessments</p> <p>Learning Environment</p> <p>Learning Resources</p> <p>Course Tools and Media</p> <p>Instructor role</p>	*These items to be addressed during redesign.
Scope of Revision	
<p>Professional Development</p> <ul style="list-style-type: none"> • See Faculty Development report • End of term course assessment participation 	
<p>Other</p> <ul style="list-style-type: none"> • Resume: on file • SRTs: Student Ratings of Teaching 	

QIP Sub-Appendix A3: Students

Career Services Graduate Outcome Survey

Around six months following graduation, Career and Internship Services survey graduates to track their employment success. Results are reported by college and program. We track the trends in our students' work placement and job satisfaction. Results of past surveys are available at careerhelp.umn.edu/salarystat. The most recent results available are for 2020.

Survey results for Construction Management for the past five years are shown below with comparative data for the College of Continuing and Professional Studies (CCAPS) as a whole.

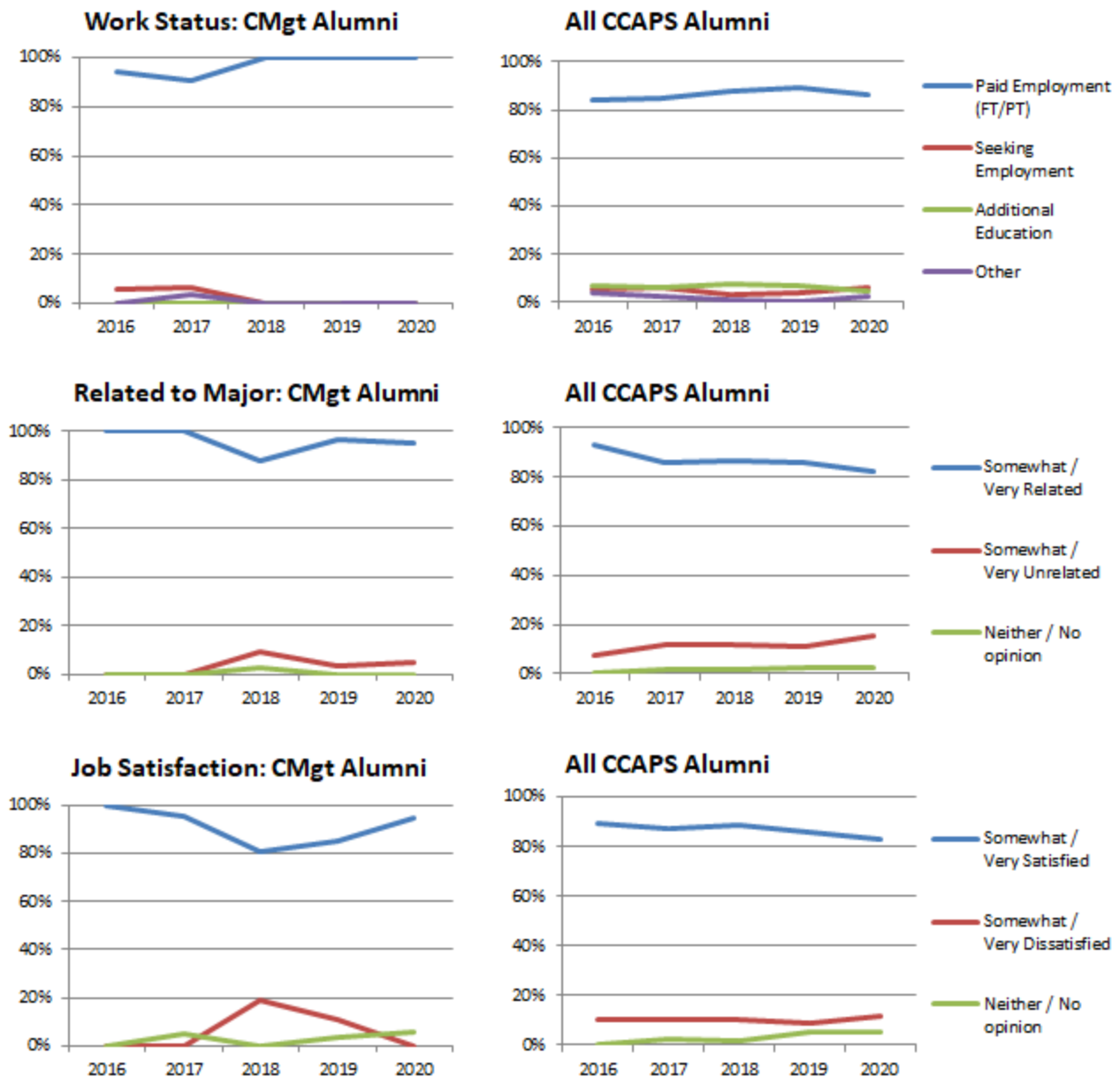


Figure A3.1. Graduate Survey Results for Construction Management and All CCAPS Alumni

QIP Sub-Appendix A4: Faculty

Full-time faculty positions, such as the faculty-director, are reviewed annually. Adjunct faculty are reviewed as part of the three-year course review process and an assessment by one or more supervisors. Faculty reviews include a review of Student Rating of Teaching (SRT) from each semester, as well as an overview of teaching ratings over the faculty member's duration of service. Goals are set and reviewed as part of the performance assessment.

1. Student Rating of Teaching Surveys

The University [Evaluation of Teaching policy](#) requires that every course, except internships and directed studies, is evaluated each time it is offered. Evaluation is coordinated by the Office of Measurement Services (OMS) which distributes the SRT forms, collects the completed data from departments, and provides summaries of the results to individual faculty and department heads/chairs (additional information is given at [the SRT Process website](#)).

The [SRT form](#) was introduced in spring 2008 and revised in 2015 and 2018. It was developed by a subcommittee of the Faculty Senate Committee on Educational Policy (SCEP) and the Senate Committee on Faculty Affairs (SCFA). The new SRT form was pilot tested in spring 2007 with approximately 50 courses, and it included specific teacher and student input.

The SRT form intends to assess teaching more holistically and produce results both relevant to the classroom experience and linked to the [University student-learning outcomes](#). The SRT has improved how teaching is assessed by students, and it helps instructors better understand how they can improve teaching. This form has a solid research base on student learning and instructional excellence.

The SRT form is divided into two sections:

- Section 1: Instructor Ratings – This section contains questions for students to rate their instructor and an open-ended question: “What did the instructor do that most helped your learning?”
- Section 2: Course Ratings – This section contains questions for students to rate their course and an open-ended question: “What suggestions do you have for improving this course?”

Course ratings are used to provide future students with information about the course. Summary reports are sent by OMS to departmental heads, including statistics for each question. Department chairs and committees use course evaluations during annual faculty reviews to make decisions on salary increases, promotions, and tenure.

The Construction Management program tracks the results of our SRTs each semester, and the faculty director follows up with individual faculty to discuss assessments and trends. A summary of SRT results from all Construction Management courses for the last three years are posted below in figure A4.1.

UAPS SRT Evaluation Summary by Program

Academic Year AY 2021-22

Construction Management

AY 2021-22	Response Rate	211 / 863 (24.4%)	Mean	5.16	Std Dev	1.18				
Eval Form SRT-2015		% Responses								
Instructor Questions		1	2	3	4	5	6	Mean	SD	
1 The instructor was well prepared for class		3%	2%	3%	14%	20%	57%	5.18	1.23	
2 The instructor presented the subject matter clearly		2%	3%	4%	13%	25%	51%	5.1	1.23	
3 Interactions with the instructor helped me learn		4%	1%	5%	13%	21%	55%	5.1	1.31	
4 The instructor treated me with respect		1%	2%	0%	7%	23%	67%	5.5	0.91	
5 The instructor provided feedback intended to improve my course performance		3%	5%	3%	14%	21%	53%	5.05	1.34	
6 I would recommend this instructor to other students		3%	3%	5%	11%	25%	52%	5.07	1.3	
Course Questions		1	2	3	4	5	6	Mean	SD	
1 I have a deeper understanding of the subject matter		1%	0%	0%	15%	22%	61%	5.41	0.89	
2 My interest in the subject matter was stimulated by this course		2%	3%	4%	15%	23%	52%	5.11	1.2	
3 Instructional technology employed in this course was effective		2%	3%	7%	11%	32%	45%	5.04	1.2	
4 The activities in this course supported my learning		0%	1%	2%	13%	26%	57%	5.34	0.92	
5 The amount of effort need to be successful in this course is reasonable		4%	3%	5%	10%	34%	44%	4.97	1.3	
6 The grading standards for this course were clear		1%	1%	3%	21%	25%	49%	5.14	1.04	
7 I would recommend this course to other students		3%	2%	5%	13%	29%	49%	5.09	1.2	

AY 2020-21	Response Rate	175 / 930 (18.8%)	Mean	5.34	Std Dev	0.97								
Eval Form SRT-2015							% Responses							
Instructor Questions							1	2	3	4	5	6	Mean	SD
1 The instructor was well prepared for class							1%	1%	0%	6%	30%	61%	5.46	0.89
2 The instructor presented the subject matter clearly							1%	0%	1%	12%	27%	59%	5.39	0.9
3 Interactions with the instructor helped me learn							2%	3%	1%	9%	33%	53%	5.28	1.06
4 The instructor treated me with respect							3%	0%	1%	3%	21%	72%	5.58	0.93
5 The instructor provided feedback intended to improve my course performance							2%	1%	5%	11%	26%	55%	5.24	1.1
6 I would recommend this instructor to other students							2%	2%	2%	9%	27%	57%	5.29	1.11
Course Questions							1	2	3	4	5	6	Mean	SD
1 I have a deeper understanding of the subject matter as a result of this course							1%	1%	2%	10%	26%	61%	5.43	0.86
2 My interest in the subject matter was stimulated by this course							2%	2%	2%	13%	28%	53%	5.23	1.1
3 Instructional technology employed in this course was effective							1%	3%	3%	11%	28%	53%	5.23	1.07
4 The activities in this course supported my learning							0%	1%	0%	11%	35%	53%	5.4	0.74
5 The amount of effort need to be successful in this course is reasonable							1%	1%	6%	8%	34%	50%	5.25	0.97
6 The grading standards for this course were clear							1%	1%	2%	16%	28%	51%	5.25	0.95
7 I would recommend this course to other students							0%	1%	3%	10%	29%	57%	5.38	0.85

AY 2019-20	Response Rate	261 / 797 (32.7%)	Mean	5.41	Std Dev	0.96				
Eval Form SRT-2015			% Responses							
Instructor Questions			1	2	3	4	5	6	Mean	SD
1 The instructor was well prepared for class			0%	1%	0%	4%	25%	70%	5.64	0.63
2 The instructor presented the subject matter clearly			2%	2%	2%	9%	29%	57%	5.32	1.04
3 Interactions with the instructor helped me learn			5%	3%	4%	12%	35%	42%	4.94	1.31
4 The instructor treated me with respect			3%	1%	0%	1%	19%	76%	5.62	0.95
5 The instructor provided feedback intended to improve my course performance			1%	1%	3%	7%	23%	65%	5.46	0.92
6 The instructor found ways to teach remotely that worked for this course			4%	2%	3%	10%	32%	49%	5.09	1.27
7 I would recommend this instructor to other students			0%	1%	2%	6%	19%	72%	5.58	0.79
Course Questions			1	2	3	4	5	6	Mean	SD
1 I have a deeper understanding of the subject matter as a result of this course			3%	1%	2%	8%	33%	53%	5.28	1.06
2 My interest in the subject matter was stimulated by this course			0%	0%	5%	10%	25%	59%	5.39	0.87
3 Instructional technology employed in this course was effective			0%	1%	1%	9%	31%	58%	5.45	0.76
4 The activities in this course supported my learning			0%	0%	0%	25%	13%	63%	5.38	0.89
5 The grading standards for this course were clear			0%	2%	3%	7%	25%	63%	5.45	0.88
6 I would recommend this course to other students			0%	1%	1%	6%	30%	62%	5.5	0.78
7 The course site was easy to use			6%	0%	6%	13%	25%	50%	5	1.41

Figure A4.1 SRT Results for Construction Management faculty for last three years

2. Student Experience in the Research University Survey

The SERU survey is a comprehensive national survey administered to all undergraduates at the UMNTC. Results of the SERU survey are used to assess many elements of the program and are presented at college level. Those elements are shown in the following section. The most recent survey was in 2022.

According to the survey, a majority of CCAPS students (60%) are satisfied or very satisfied with our faculty instruction, figure A4.2. Other SERU results cover the level of engagement our faculty have with students, figures A4.3, A4.4; the overall educational experience, figure A4.5; and the rapport students feel with faculty, expressed by the number of our faculty that students know well enough to ask them for a letter of recommendation, figure A4.6.

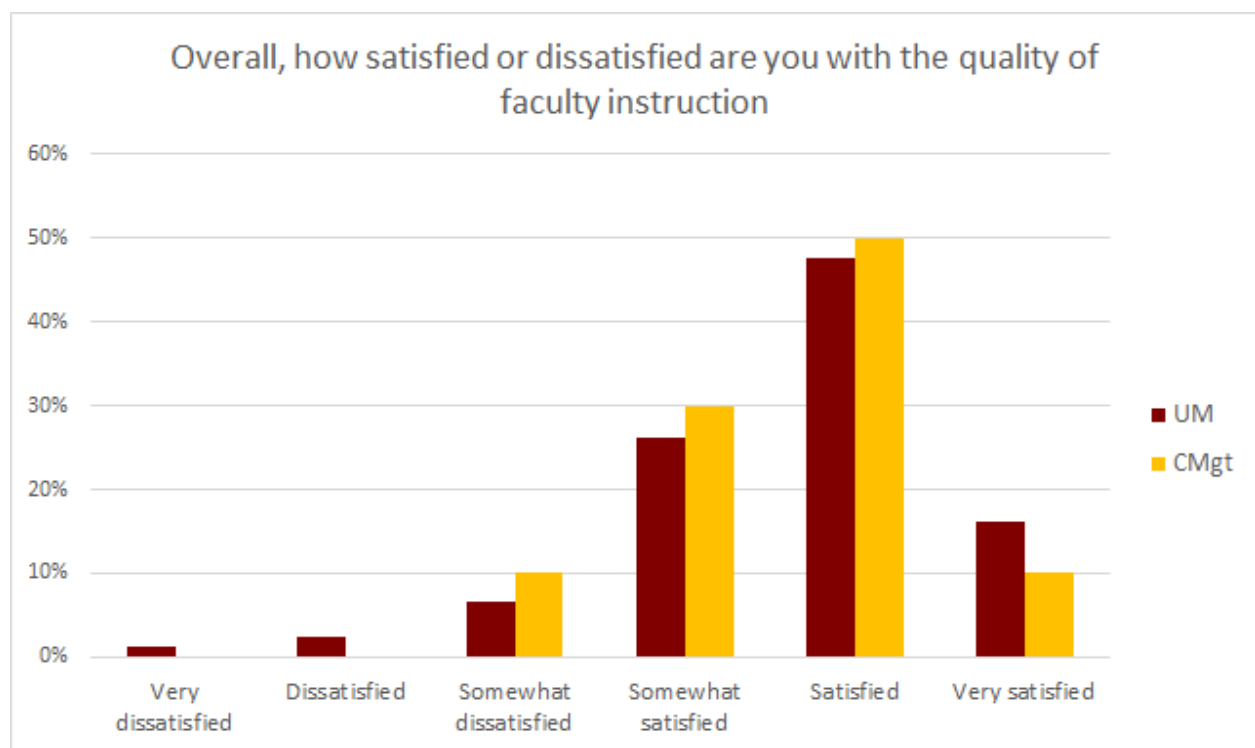


Figure A4.2. Satisfaction with Instruction

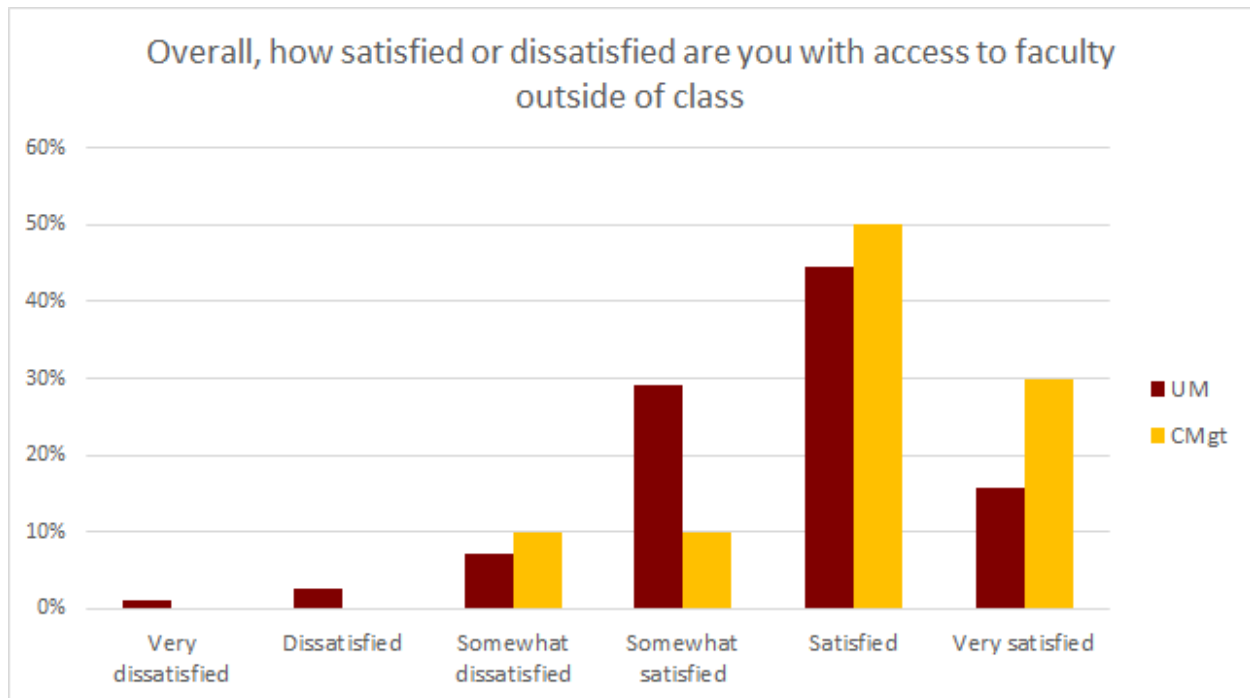


Figure A4.3 Satisfaction with Access to Faculty

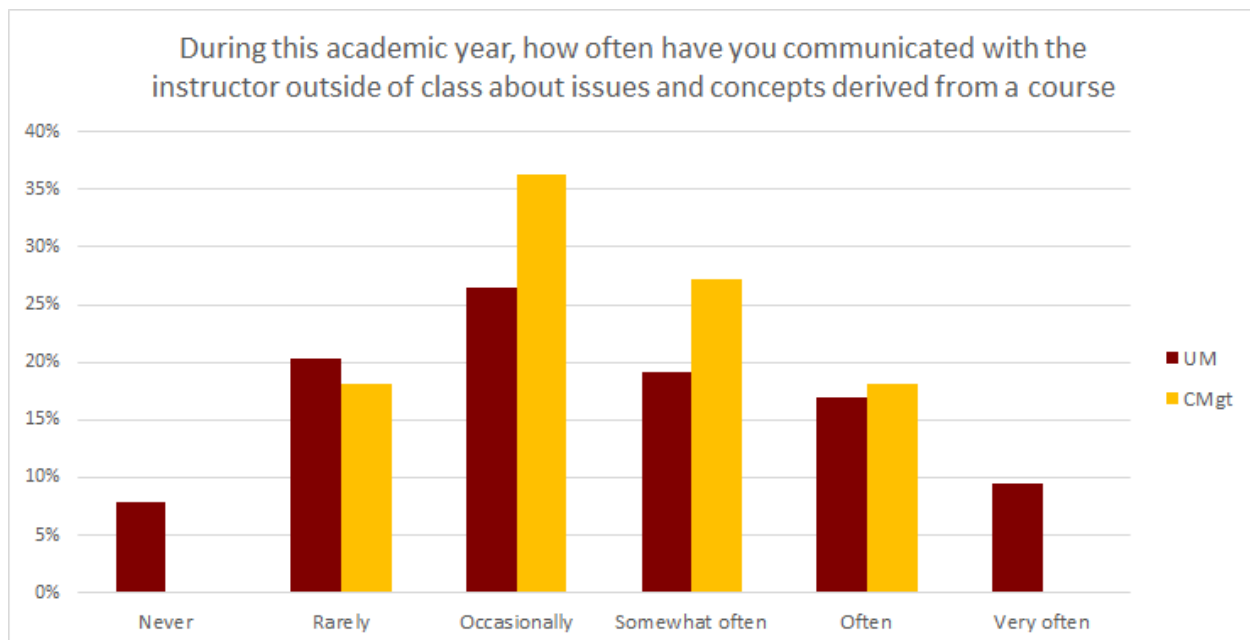


Figure A4.4 Student-Faculty Engagement

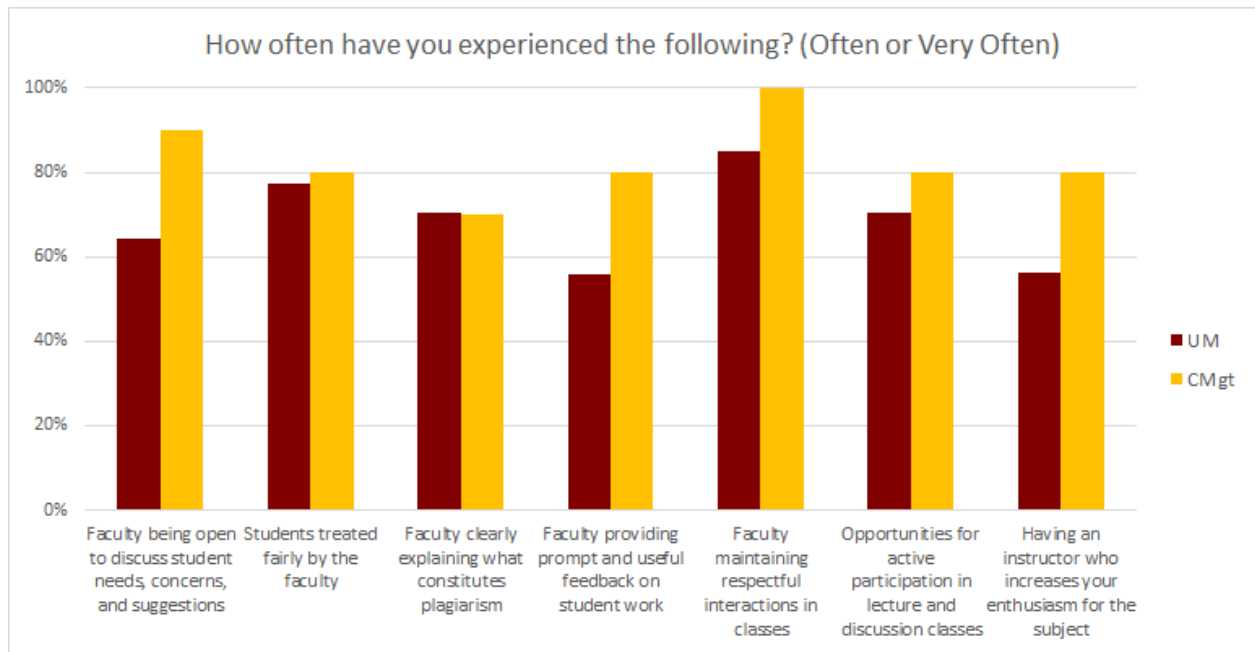


Figure A4.5 Overall Educational Experience

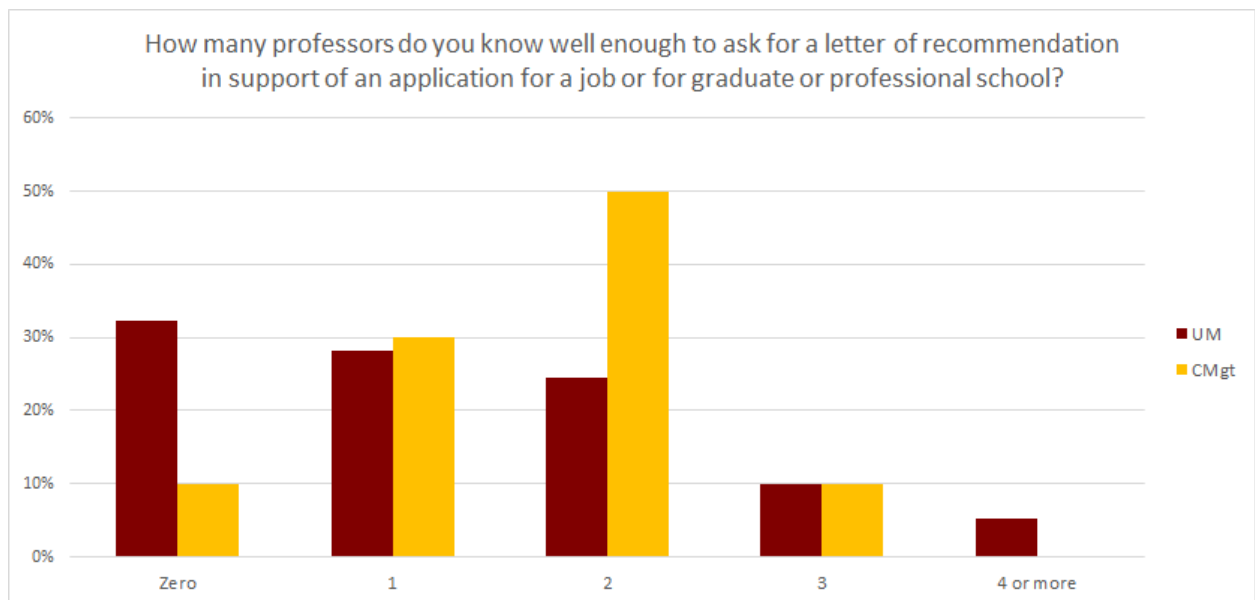


Figure A4.6 Student-Faculty Rapport

SOURCE: SERU Survey 2022

3. Performance Review

Each year, faculty directors and staff are reviewed by the program administration as required by the University of Minnesota. A new performance review form was introduced in 2020 to standardize

performance assessment and goal setting and to discuss professional development needs and plans. The process moved to a new online performance appraisal tool in 2021.

The review process is described below, and the form is shown below, figures A4.9 and A4.10.

Step 1: Review and update position descriptions with supervisor.

Step 2: Employees complete and submit Employee Input Form to supervisor.

Step 3: Supervisors complete Performance Review and meet with their employees to discuss the review and rating.

Step 4: All completed reviews, including ratings are submitted to Unit Directors.

Step 5: Unit Directors submit signed forms (printed or electronically) to CCAPS Human Resources.

UNIVERSITY OF MINNESOTA
Driven to Discover®

Performance Appraisal Tool (PAT)

Employee:	Name:	ID:
	Job Title:	Job Code:

PART 1: GOALS

Start by Setting Goals:

- Goals should identify the most important objectives for you over the next year.
- Goals should be specific, important and measurable while describing both **results** and **behaviors**.
- Goals should be aligned to college/unit/department strategic priorities.
- Goals should be flexible to adjust to changes throughout the year.
- Goals are not job descriptions or a list of activities.
- You should have 1-3 goals at a time and update them throughout the year as needed. As you complete one goal, fill in the completed date and add additional goals if applicable.

i Want to learn more about goal setting best practices? See the [Performance Management: Setting Goals](#) page (opens in a new window) for more information.

Goal 1 Title:

Completed Date:

Goal 1 Description:

Goal 2 Title:

Completed Date:

Goal 2 Description:

Goal 3 Title:

Completed Date:

Goal 3 Description:

Discuss Goals:

- Your manager and you should regularly discuss the progress of the goals and to make any updates or changes to the goals as needed. During your check-in conversations, discuss:
 - What are the **two things** that are working well to support goals?
 - What are the **two things** that you need to do more or less of to help achieve those goals?
- Add additional goals as you complete one. You should have 1-3 goals - no more.
- You can summarize your ongoing check-in discussions throughout the year. These summaries then aid in writing annual performance reviews. To add a check-in summary, click < Continue to Performance Evaluation >.

Figure A4.7 Performance Review Form - Part 1

UNIVERSITY OF MINNESOTA
Driven to Discover®

Performance Appraisal Tool (PAT)

Employee: Name: ID:

Job Title: Job Code:

PERFORMANCE EVALUATION

Complete both Part 2 and Part 3 below. Please note: The employee input section is intended to inform the formal evaluation, but it is not included in the formal evaluation and it will not appear on the printed version.

PART 2: KEY ACCOMPLISHMENTS AND CONTRIBUTIONS

Supervisor: What results were achieved - key accomplishments and contributions. Describe the employee's most important accomplishments during the current evaluation period. Describe the impact those accomplishments had and the contributions made to important goals and priorities.

PART 3: BEHAVIORAL COMPETENCIES

Supervisor: How results were achieved - behavioral competencies. (i.e., skills, knowledge, abilities, and other characteristics) that were most important in supporting accomplishments and the contributions made to important goals and priorities.

How results are achieved is often described by how well the person works with others; that's when the behavioral competencies come into play. Don't have a behavioral competency model? Go to z.umn.edu/competencies to learn more about the competency model developed at the University of Minnesota to support talent development.

Continue **Back to Goals**

Figure A4.8 Performance Review Form - Parts 2 and 3

QIP Sub-Appendix A5: Advising

1. CCAPS Satisfaction Survey

CCAPS conducts a student satisfaction survey in fall each year to measure service satisfaction among all students/participants who have registered, enrolled, or attended CCAPS degree/certificate programs, Continuing Professional Education, nondegree-seeking students and noncredit personal enrichment courses. The most recent survey took place in fall 2019.

Detailed Results

Results from the questions which relate to CCAPS staff, including advising, are presented below. They found 88% of students felt very or extremely satisfied that staff were committed to their success, and 85% reported contacts with CCAPS staff to be very or extremely helpful.

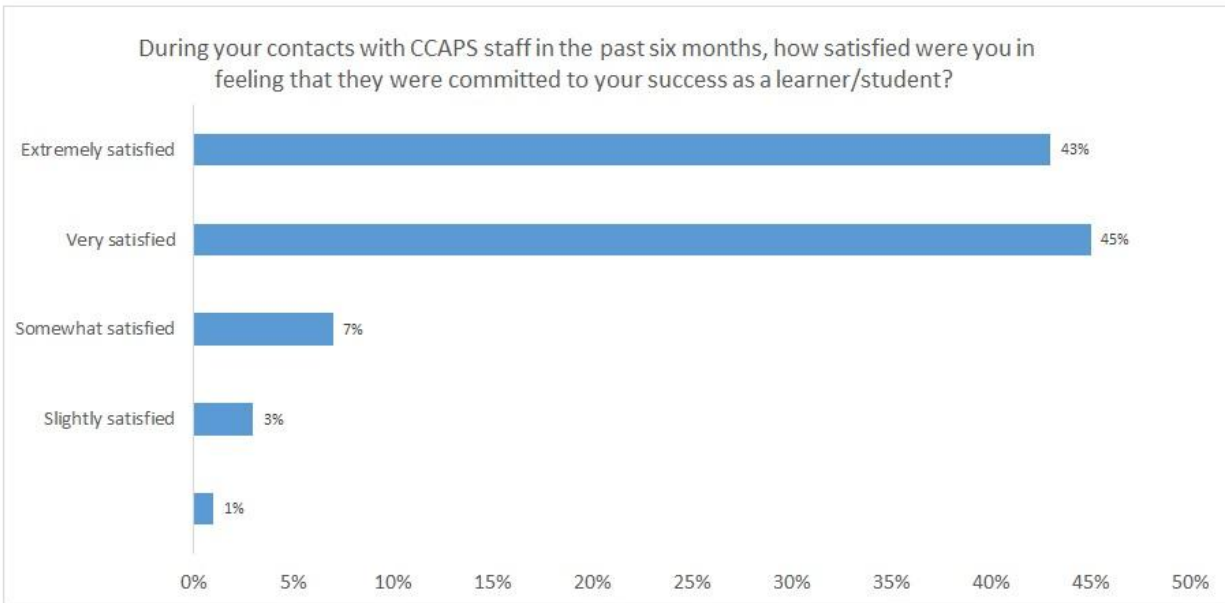


Figure A5.1: Satisfaction with CCAPS Staff

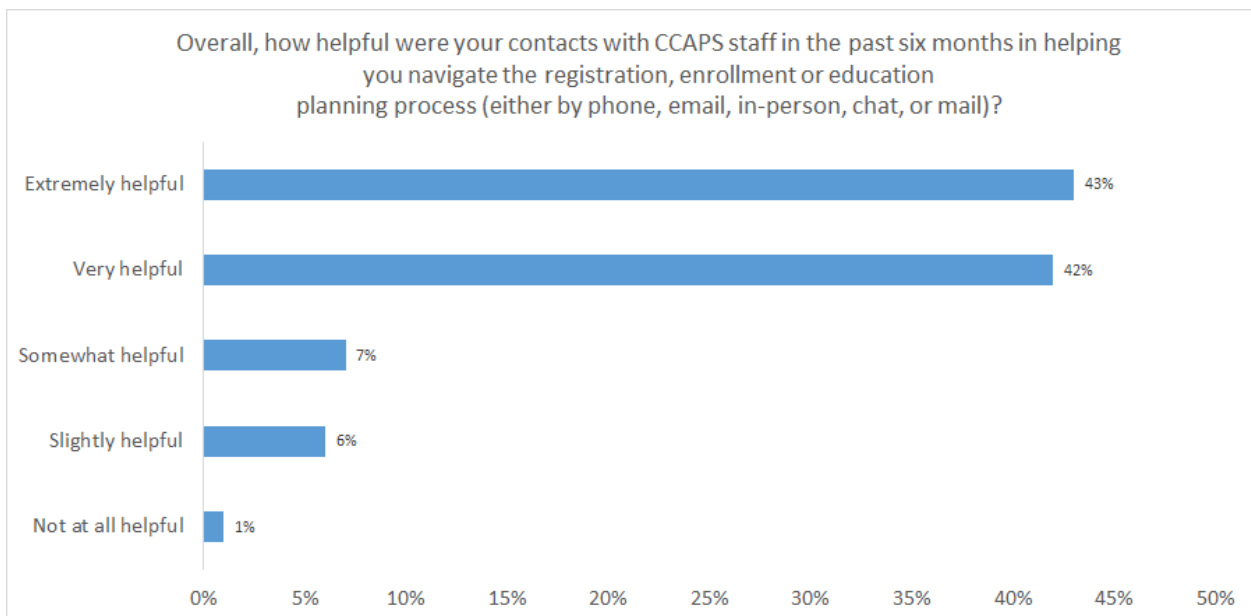


Figure A5.2: Helpfulness of CCAPS Staff

2. Student Experience in the Research University Survey

As noted above, the SERU survey is a comprehensive national survey administered to all undergraduates at the UMNTC. The survey asks students about their satisfaction with departmental advising. Results from the spring 2022 SERU survey are shown below.

As indicated by figure A5.3, the majority (70%) of our students are satisfied or very satisfied with our academic advising.

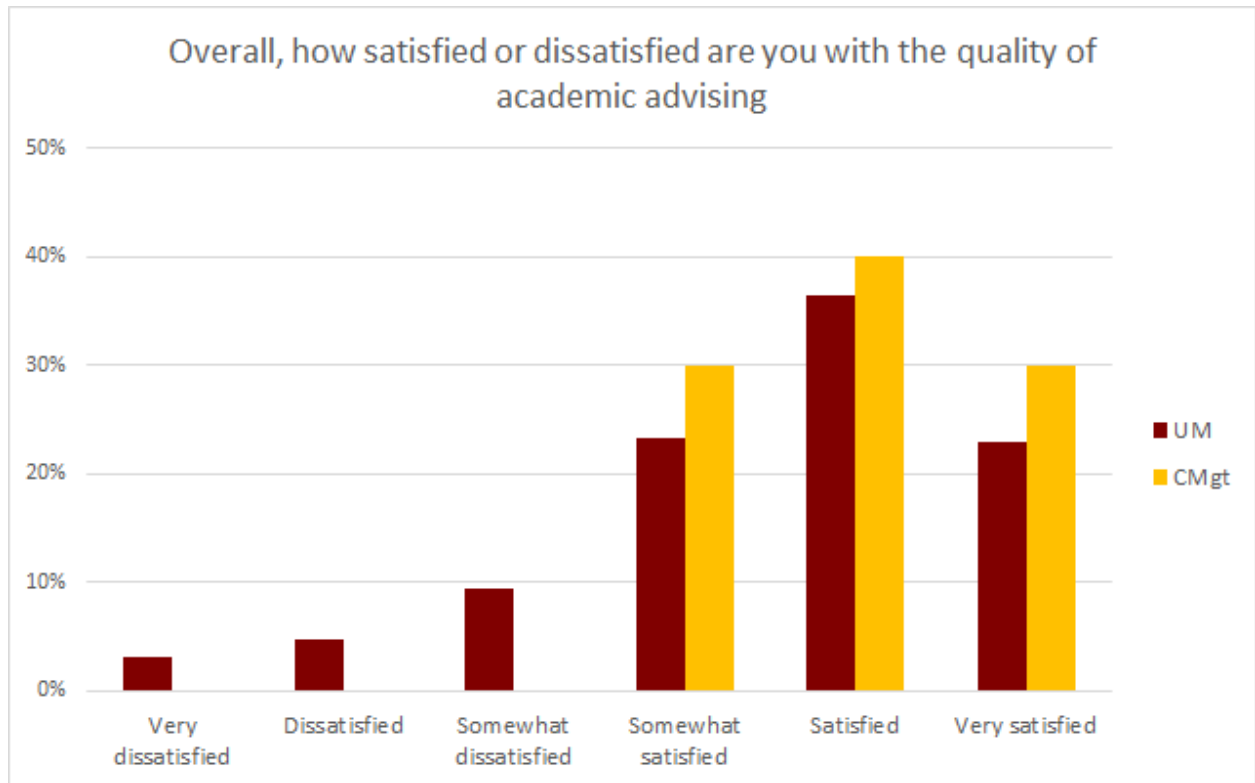


Figure A5.3: Satisfaction with the Quality of Academic Advising

APPENDIX B

University of Minnesota Construction Management Program

Academic Quality Plan Assessment – 2021-22

Mission Statement

Preparing future construction leaders to sustainably manage the built environment.

Program Goals

The goals of our construction management program are as follows:

1. Graduate well-qualified major/minor/certificate students
2. Partner with the University of Minnesota College of Design (CDES), the College of Science and Engineering (CSE), Sustainability Studies Management (SSM), and the Housing Studies program to serve the construction industry
3. Collaborate with other regional construction management programs to serve industry
4. Develop industry relationships to support student contact with industry mentors, internships, and employment
5. Contribute to the growth and improvement of the construction industry

Annual Plan

Our Construction Management Annual Plan (Appendix C) lists objectives for meeting each of the goals listed above.

Student Learning Outcomes and Metrics

Student Learning Outcomes are assessed continuously as part of our Construction Management Quality Improvement Plan (QIP) (Appendix A). We have developed six Program Learning Outcomes (PLO) informed by 35 Program Level Competencies (PLC) that support the first goal of graduating well-qualified major, minor, and certificate students. As a major step in fully implementing the outcomes-based standards required by our accreditation organizations, ABET and FMAC, course outcomes and competencies have been mapped across the curriculum, including the method of assessment. This is facilitated by analysis of assessment data gathered in the Canvas course management system.

Table B1. Student Learning Outcomes and Measurement Results

Student Learning Outcome	Metric/Measure of success	How Achieved	Results for 2021–22
1. Recognize, understand and effectively interact with stakeholder interests			
1.1	Students can demonstrate written, oral, aural, and graphic communication skills through repetitive assessment and evaluation of industry-appropriate genre.	At least one assessment in eight core courses will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum.	11 assessment points in 6 courses 77% rated exemplary or proficient
1.2.	Students can lead, manage and participate in teams including those of diverse composition.	At least one assessment in four core courses will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum. Assessment may include a peer review component at the discretion of faculty to determine participation effectiveness.	3 assessment points in 3 courses 69%
1.3	Students can identify the roles of individuals, companies, and agencies involved in the project process.	At least one assessment in four core courses will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum.	6 assessment points in 4 courses 74%
1.4	Using factors around health, safety, welfare, comfort, safety, and security within the organization, the student can practice applications of human resource management.	At least two assessments in CMGT 4861 Capstone will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the course.	2 assessment points in 1 course 94%
1.5	Students can recognize the contribution of the design disciplines’ processes.	At least one assessment in three core courses will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum.	1 assessment point in 1 courses 29%
2. Demonstrate ethical behavior and decision-making			

2.1	The student can analyze professional decisions based upon ethical principles.	At least one assessment in four core courses will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum.	5 assessment points in 3 courses 71%
2.2	NOT USED (Reserved for future)		
2.3	The student can identify the skills needed to strategically lead process, organization, stakeholders and technologies in an ethically responsible way.	At least four discrete assessments in CMGT 486 Capstone will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the course.	4 assessment points in 1 course 91%
3. Safely manage and control the project process			
3.1	NOT USED (reserved for future)		
3.2	Students can identify construction project control processes.	At least one assessment in four core courses will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum.	2 assessment points in 2 courses 80%
3.3	Students can compare construction quality assurance and control.	At least one assessment in four core courses will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum.	2 assessment points in 2 courses 78%
3.4	Students can apply appropriate state-of-the-art, electronic-based technology to manage the project process.	At least one assessment in four core courses will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum. Program will make available an academic Bluebeam license to all students enrolled in core coursework.	No data
3.5	Students will implement project safety strategies and jobsite procedures.	At least one assessment in three core courses will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum.	2 assessments in 2 courses 85% 40/42 (95%) earned their OSHA 30 in CMGT 4031

		At least 80% of enrolled students in CMGT 4031 will earn their OSHA 30-hour safety card.		
3.6	Students can create a construction project safety plan.	At least one assessment in CMGT 4031 Safety and Loss Control, CO6 Injury Report, will measure this competency, with at least 80% of the students receiving a “proficient” rating.		3 assessment points in 1 course 100%
3.7	Students can assemble construction estimates using various techniques assessing quantities, productivity and costs.	At least one assessment in CMGT 4022 Estimating will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the course.		1 assessment point in 1 course 100%
3.8	Apply scheduling techniques to project planning activities.	At least one assessment in CMGT 3001 Intro, and at least two assessments in CMGT 4021 Planning and Scheduling will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum.		1 assessment point in 1 course 58%
3.9	Calculate necessary resource requirements throughout a project.	At least one assessment in CMGT 4021 Planning and Scheduling will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum.		100% covered in CMGT 4021 but not separately assessed. Part of the final project.
4. Understand the built environment				
4.1	Students can analyze construction documents for planning and management of construction processes.	At least one assessment in four core courses will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum.		No data
4.2	Students can assess the condition of the facility including its systems, structure, interiors, exteriors, and grounds to establish a long-term facility plan for the organization.	At least one assessment in four core courses will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum.		2 assessment points in 2 courses 81%

4.3	Analyze methods, materials, and equipment used to construct projects.	At least one assessment in three core courses will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum.		No data
4.4	Understand the basic principles of structural behavior.	At least six assessments in CMGT 4544 and 4545, the Structures sequence, will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the courses.		100%
4.5	Describe the basic principles of mechanical, electrical, and plumbing systems.	At least four assessments in CMGT 4542 Building Energy Systems will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the courses.		No data
4.6	As a foundation for operations, maintenance, and energy management, the student can recognize the systems, services and functions thereof, and the software applications that support them.	All assessments in this course come from CMGT 4542 Building Energy Systems.		No data
4.7	Apply basic surveying techniques for construction layout and control.	At least 90% of the students enrolled in CECE 3202 Surveying pass this course with a grade of “C” or better.		CECE 3202 meets this competency 15/15 students met this criteria, 100%
4.8	Demonstrate awareness of environmental stewardship and sustainable principles applied to the project and the organization.	At least one assessment in three core courses will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum.		2 assessment points in 1 course 66%

5. Manage the business processes				
5.1	Students can demonstrate an understanding of business and management fundamentals as they relate to construction and facility activities.	At least one assessment in five core courses will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum.		11 assessment points in 6 courses; 61%

		All students will participate in an internship (except those with experience that meet this requirement by Directed Study). An aggregate retention/rehire rate of 50% can be demonstrated for the program as a whole.	Internship retention rate 78% (2021–22: 7/9 evaluation responses received perm offers)
5.2	Students can explain the history, international practices, corporate organization and roles of the Facility Management profession.	Assigned readings in the course textbook within CMGT 3024W Facility Programming and Design will cover this competency.	3 assessment points in 3 courses. No data
5.3	Using principles of acquisition, installation, operations, maintenance, outsourcing, renovation, and disposition of building systems, structure, interiors, exterior, and grounds, the student can demonstrate the phases of facility management from design/acquisition to final disposition.	At least one assessment in four core courses will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum.	1 assessment point in 1 courses 87%
5.4	Recognize the legal implications of contract, common, and regulatory law to manage a project.	At least one assessment in four core courses will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum.	3 assessment points in 2 courses 95%
5.5	Evaluate disputes based on case facts and contract content.	At least one assessment in four core courses will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum.	7 assessment points in 3 courses 69%
5.6	Apply analysis, budgeting, accounting, risk management, and reporting to demonstrate applications of construction and facility financial management.	At least one assessment in either CMGT 4201 Const. Accounting or CMGT 4211 FM Accounting, plus one assessment on Pay Applications in CMGT 4011, will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum.	1 assessment point in 1 courses 7%
5.7	Demonstrate applications of corporate real estate finance,	At least one assessment in two core courses will measure this competency,	No data

	management, and transactional execution.	with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum.		
5.8	Demonstrates the ability to understand and apply computer applications for facility management problem solving.			No data

6. Manage building systems, facility operations, occupant services and maintenance operations				
6.1	The student can demonstrate a method to plan, measure, and evaluate the facility’s operational performance.	At least one assessment in two core courses will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the curriculum.		No data
6.2	The student can interpret, apply, and recommend quality improvement programs.	At least one assessment in one core course will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the course.		2 assessment points in 2 courses (CMGT 4213, 4215); data pending
6.3	The student aligns facility management technology with organizational information technology.	At least one assessment in one core course will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the course.		1 assessment point in one core course (CMGT 4215); data pending
6.4	Comprehend and prepare emergency preparedness and business continuity strategies.	At least one assessment in one core course will measure this competency, with at least 80% of the students receiving a “proficient” rating per the assessment rubric measured across the course.		2 assessment points in two core courses (CMGT 4213, 4215); data pending

Table B2. Program Goal Metrics

2014 Metrics	Results	2022 Goal
1. Graduate well-qualified students		
Students take the CMIT exam as part of the CMGT 4861 Construction Management Capstone course.	No students took the exam in spring 2022, though they remain eligible.	Increase the number of students who take the CMIT test. Demonstrate a 70% passing rate.
Program internship places students in jobs where they receive additional education and work experience. Employers will judge whether students are “well prepared” by offering them permanent positions within their companies.	<p>Permanent job offers to interns are generally high. Information is reported via the internship evaluation survey.</p> <p>The ratio of job offers to survey respondents by Academic Year (fall–summer) and survey response rate. 2021-22: 7/9 (78%) 26% response 2020-21: 5/5 (100%) 13% response 2019-20: no response to survey</p>	<p>Continue to increase the number of internship opportunities for students.</p> <p>Increase percentage of returned internship surveys to 70%.</p> <p>Begin to analyze responses, and track for years forward.</p>
Students are hired into construction management jobs.	<p>Career and Internship Graduate survey</p> <p>Summer each year: Latest results 2020. 2020: 100% of CMGT graduates working in paid employment. 95% in a job somewhat or closely related to the major. 2019: 100% of CMGT graduates working in paid employment. 96% in a job somewhat or closely related to the major. 2018: 100% of CMGT graduates working in paid employment. 88% in a job somewhat or closely related to the major.</p>	Continue to track and show a high rate of students working in the construction field. Begin monitoring data, and demonstrate positive trends moving forward.
Student written work meets industry standards for quality, clarity, format, and completeness	Independent industry raters evaluate student work in CMGT 4041W, giving scores for a variety of criteria. The work is rated on a scale of 0–2. Both objective and subjective assessments are obtained and recorded for program analysis. Last evaluated 2011, 2014.	<p>Rating of upper-division writing metrics show improvement each year.</p> <p>Next rating due 2021 (canceled 2020 due to COVID)</p>

2. Partner with other University of Minnesota colleges to serve industry		
Students from other colleges enroll in our CMGT courses	Registrations in Construction Management classes from students in other colleges, by Academic Year (fall–summer) AY 2021-22: 219 (31%) AY 2020-21: 203 (25%) AY 2019-20: 238 (31%)	Increase the number of students from other colleges enrolled in courses.
Students complete the CMGT minor	CMGT minor completion data is given below by Academic Year (fall–summer) AY 2021-22: 8 AY 2020-21: 4 AY 2019-20: 5	Participate in the University-wide Minors Fair every fall.
Students complete the CMGT certificate.	CMGT certificate completion data is given below by Academic Year (fall–summer) AY 2021-22: 9 AY 2020-21: 8 AY 2019-20: 5	Last metric: Target the number of certificate applications to 8.
Our college cosponsors events and outreach activities with other colleges.	The CMGT program collaborates with UMN Colleges of Science and Engineering, and College of Design, and regional Colleges that teach construction management to offer an intercollegiate career fair and an annual Quiz Bowl, each October since 2012. We assist with and participate in the Spring Pentathlon event, an intercollegiate Construct*ium event, annually in April.	Hold two intercollege events per year: Quiz Bowl/Career Fair in October; Pursuit Competition event in April 2021: The career fair was online and no Quiz Bowl was held.
Advisory board members include representatives from other colleges.	The CMGT Advisory Board includes a representative from the College of Science and Engineering. Advisory Board Company List	Continue as is.

3. Collaborate with regional CMGT programs to serve industry		
Sponsor joint events with regional CMGT programs through Construct*ium.	<p>CMGT attends the monthly meeting, held for the last two years, that includes representatives from all regional CMGT programs.</p> <p>CMGT staff and students have participated in three MCA golf scholarship fundraisers with representatives from other regional CMGT programs.</p> <p>Annual Quiz Bowl held each October including teams from four to six regional colleges.</p> <p>Annual Intercollegiate Career Fair held each October, with invited students from nine regional schools.</p> <p>Annual Pentathlon Soft Skills Competition, with invited students from nine regional schools (every two years)</p> <p>In 2014 the CMGT program, in collaboration with midwest construction management programs, organized the Upper Midwest Collegiate Construction League (Construct*ium).</p>	Continue participation and leadership in Construct*ium activities.
UMN staff participate on regional CMGT boards.	Peter Hilger serves on the Advisory Board for Dakota Technical Community College, a two-year feeder program.	Continue membership on Dakota Tech Advisory Board.
4. Develop industry relationships to support students		
CMGT program maintains a database of 700+ employer contacts.	Database continued to be increased, updated, and revised.	Maintain database, augment with new contacts annually.
CMGT program maintains an active advisory board made up of representatives from all industry segments and potential employers.	Our Advisory Board has 47 voting members. Membership is drawn from general contractors, heavy engineering, subcontractors, owner reps, nonprofits, associations, and consultancies.	Maintain membership of 45 active members.

CMGT program requires an internship by all students. CMGT program assists students in obtaining internship positions by facilitating a “virtual job fair.”	CMGT program emails all internship candidate resumes to our database of potential employers every spring (Virtual Career Fair).	Continue, but increase the number of potential employers by 5% per year.
5. Contribute to growth and improvement of the construction industry		
CMGT program sponsors outreach and informational activities aimed at industry professionals.	<p>CMGT program sponsored a white paper discussion on Best Value in 2009, attended by over 50 industry professionals.</p> <p>Faculty Jain and Hilger presented weeklong technical seminars on project management themes each of 2017 and 2018 for the NOAA Kansas City Office.</p> <p>Hilger is an editorial contributor for Construction Business Owner magazine.</p> <p>Hilger has published a white paper, <i>Communication, the Bedrock of Construction</i>, for <i>Construction Business Owner</i> magazine.</p> <p>Hilger has been selected by Taylor Routledge Publishing to write a textbook on communication, along with former Research Assistant Heidi Wagner, due to be published 2021.</p>	Identify one white paper opportunity.
CMGT program offers a stormwater training program to construction professionals in need of certification.	<p>CMGT 4081: Managing Erosion and Sediment Control on Construction Sites</p> <p>Registration: Spring 2022: 2 (All CCAPS) Spring 2021: 9 (All CCAPS) Spring 2020: 14 (13 CCAPS, Other colleges 1)</p>	Increase number of enrolled students in CMGT 4081.

APPENDIX C

University of Minnesota Construction Management Program

Annual Plan* 2021–22

Mission Statement

Preparing future construction leaders to sustainably manage the built environment.

Program Goals

The goals of our construction management program are as follows:

1. Graduate well-qualified major/minor/certificate students
2. Partner with the University of Minnesota College of Design (CDES), College of Science and Engineering (CSE), Sustainability Studies Management (SSM), and the Housing Studies program to serve the construction industry
3. Collaborate with other regional construction management programs to serve industry
4. Develop industry relationships to support student contact with industry mentors, internships, and employment
5. Contribute to the growth and improvement of the construction industry

**updated yearly*

Annual Plan (as of September 1, 2017)

Goal	Objectives	Frequency	Status/Results
1. Graduate well-qualified major/minor/certificate students			
1a. Obtain/Maintain Program Accreditation			
	ACCE: Submit annual progress report	Annually, due December 1, 2017	No longer a member of ACCE, switched accreditation to ABET, retroactive to October 2018.
	Document data collection	Ongoing issue	All coursework now collects data on student outcomes continuously, hosted and compiled by ATD through the Canvas learning management system platform.
	Attend ACCE midyear meetings	Not attended in 2017-18 school year	Last attended February 2015. Shifting to ABET model January 2019. Not planning to attend ACCE. Hilger trained at ABET as a Site Team Visitor, 2018.
	Consider ABET Accreditation	One time	DONE. ABET conferred accreditation with no weaknesses or concerns, September 2020.
	Update annual strategic plan	Annually at start of fall semester	Complete with this report.
	Update and implement outcome assessment plan	Fully implemented, continuous assessment data collected	Ongoing.
	Attend IFMA annual meetings	Annually in fall	Peter Hilger attends World Workplace every fall (could not attend fall 2018, 2019, but serves on FMAC Board).
	Maintain IFMA/ABET accreditation: file annual report and renewal	Annually in fall	Full reaccreditation achieved in 2019 for six years by ABET.
	Active participation on Facility Management Accreditation Commission (FMAC)/ABET	Annually	Peter Hilger has completed ABET Site Visitor Training, June 2018, and is being assigned to accredit other institutions.
1b. Review curriculum to reflect changes in industry and student needs			
	Update list of courses to be reviewed each year	Annually in June and January	Schedules for course reviews are done prior to every subsequent semester in order for the OES team to manage their resources.

	Conduct course reviews	As scheduled		All courses are reviewed by the Program Director and the Faculty Director every three years. Nine courses were reviewed in 2021-22.
	Review list of courses to develop as hybrid/in person class, and/or transfer to fully online (University limits Special Topics to two semester offerings)	This is an ongoing process as a function of demand and scheduling trends		Most courses now have an online section, with others adapting to online for COVID. All courses are strongly supported by staff for either synchronous or asynchronous delivery.
	Assess delivery of ABUS 4013W Legal, Ethical and Risk Issues (Business Law)	Now on a regular course review cycle in the ABUS program		Though no technical requirement to assess since it is an ABUS course, we continue to monitor the course quality for the benefit of our students.
	Develop specialized Math course to replace Calculus Requirement	2017		Excellent results achieved, second spring section now being considered.
	Develop supplemental online resources in risk, delivery methods, ethics, vocabulary, and building techniques	Ongoing		No resources, either staff or financial, have been applied to this but are kept on the planning radar. (Low priority) NO CHANGE
	Develop Writing Style Guide for students	Annually in summer for subsequent year		Launched spring 2015. NO CHANGE, though the website is continually updated with new information. Hilger/Wagner to publish textbook fall, 2021 in support of writing in the industry.
	Develop Teaching with Writing Guide for faculty	Summer 2018		Received grant to implement Third Writing Plan. Teaching assistants worked to develop improved writing rubrics for faculty. ONGOING

1c. Assess transfer of students to University of MN Liberal Education standards				
	The U of M's Liberal Education (LE) requirements were incorporated into the existing curriculum. We will assess student issues and concerns (if any) as we transition to this new criteria	Permanent		No need for further assessment (University requirement).
1d. Student assessment and advising				

	Develop system for collecting student ePortfolios	Evaluate Annually		No work to integrate this in our program has been done yet. Kept as a placeholder as collecting outcomes data took a higher priority. Still on the “nice to have” list.
	Distribute and monitor results of student advising survey	Annually		1) Advising survey sent at end of each semester to graduating students. 2) College does a Satisfaction survey biennially including advising questions. NO CHANGE
	Record number of meetings with students and track enrollment, graduation, attrition	Annually		Every meeting with a student is recorded via notes in the A Plus system. Enrollment, grad rates and attrition tracked via University’s PeopleSoft system. NO CHANGE
	Monitor students to track percent that complete the required upper division course of study within two years.	Annually		CCAPS admits and graduates students in all semesters. Graduation rates are calculated using the number of semesters to complete. For CMGT Major students graduating during 2021–22, 35.5% (11/31) completed within two years (6 semesters) of entering the program.
1e. Student Development				
	Support CFMSA financially and administratively	Attend meetings, fund expenses		Created staff liaison responsibility with academic advisor (Megan Seltz) to improve continuity of the organization from year to year. Seltz/Hilger jointly manage.
	Identify and support participation of CFMSA in one student competition each year	Annually		CFMSA is the host organization and participates in the Intercollegiate Quiz Bowl Event, held in conjunction with the Career Fair in October.
	Participate as a college and program in Homecoming	Annually in fall		Annually participating as a College
	Host a Sigma Lambda Chi Student Chapter	Fall 2017		Maintain chapter affiliation in good standing.

	Host a Toastmasters Club with students and alumni participation	Discontinued		Hardhatter's Toastmasters Club#05573652 initiated spring 2017, was transferred to Knutson Construction in 2019, and abandoned in 2020 due to COVID and excessive management by Toastmasters. This activity is now abandoned.
1f. Faculty Development				
	Provide faculty development workshops at two faculty meetings each year by Academic Technology and Design (ATD)	Ongoing Twice annually		Portion of each faculty meeting devoted to technical or learning support and development. NO CHANGE
	Develop Canvas resources for faculty, via ATD Website	Regularly updated		Maintained by ATD. NO CHANGE
	Make seminars and resources available to our faculty through the Center for Teaching and Learning (CTL) or Office of Information Technology (OIT)	Regular notice of upcoming events		Ongoing. NO CHANGE
	Provide individual consulting on course design and management to all faculty through ATD	Faculty are regularly notified by email and at each faculty meeting		Usually provided during the Canvas course updates prior to the start of a new semester.
1g. Become active members of ASC and IFMA				
	Maintain ASC membership and facilitate student participation in competitions	Annually		Hosted 2018 ASC International Conference at U of M as part of Construct*ium. Offered participation to students in Region 4 competition in 2019 as part of Capstone requirement: no takers.
	Participate in the IFMA annual chapter symposium and several local chapter meetings	Annually in spring		Engaged with IFMA Education Committee locally. Appointed Justine Pliska, faculty, to be FM liaison to the local IFMA chapter and industry at large. NO CHANGE
2. Partner with the University College of Design, College of Science and Engineering, and Housing Studies program to serve the construction industry				
	Communicate information about career fair to CSE and CDES students and advisors;	Annually in fall semester		Held FM information presentation in Interior Design classes (Justine Pliska) spring 2019.

	provide information about courses to advisors in CSE and CDES regarding our courses, and present at CSE and CDES advisor meetings each fall			Collaborated with BBE, now SSM, for 2018–19 Race-to-Zero competition. Regularly communicate new course opportunities with the advisor network. Hilger regularly participates in student juries by invitation of CDES faculty. Invited all CSE and CDES students to our Career Fair. Invited all CDES and CSE to the Study Abroad program.
	Monitor enrollments by students from CDES and CSE	Annually in May and December		Data is collected regarding school of origin in PeopleSoft.
	Assess first delivery of BIM course, CMGT 4003 Managing in the BIM Environment	Offered in fall semester to 2020, then spring and fall from 2021.		Registrations: Spring 2022: 16 Fall 2021: 16 Spring 2021: 14 Fall 2020: 19 Fall 2019: Not offered
3. Collaborate with other regional CMGT programs to serve industry				
	Lead Construct*ium initiative	Ongoing		Awarded ASC Conference for 2018. Regularly communicate and integrate regional faculty into joint programs and initiatives. NO CHANGE
	Participate in scheduled Construct*ium conference calls for regional CMGT programs	Always, when scheduled by MCA		ONGOING; NO CHANGE
	Participate in Spring Soft Skills Event—the Pentathlon	Annually in April		MCA changes to Leadership Academy, held every two odd years (next 2021). Pursuit Competition removed from Pentathlon and sponsored every year by Ryan Construction for all nine schools.
	Support and organize annual Intercollegiate Quiz Bowl in October	Annually first Friday in October		Held October each year, sponsored by Construct*ium, organized by U of M. Canceled fall 2020 due to COVID.
	Support and organize Intercollegiate Built Environment Career Fair in October	Annually first Friday in October		Very successful, fall 2021 event attended by 7 upper midwest universities, 63 employers, nearly 200 students.
	Serve on Dakota Tech Advisory Board	2–4 times/year		Attended to by Hilger and Seltz. ONGOING

	Facilitate student tours	Variable frequency		XCEL Energy Plant in 2019. This role has been transferred to CFMSA with CCAPS staff assistance.
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4. Develop industry relationships to support student contact with industry mentors, internships, and employment				
4a. Develop internship opportunities for CMGT students				
	Modify student preparation for internship program through webinar	Annually in fall		Released and on website, also hosted a preparation session for Career Fair to CFMSA students.
	Conduct evaluations for internship students.	Every term upon completion of Internship session in December, May, and August		Google survey link emailed to all internship students. Limited response obtained.
	Expand internship employer database	Regular employer contact		Contacts as of September 1, 2020: 751
	Distribute virtual career fair PDF to prospective employers in employer database	Annually in February		Last issued February 2022. 20 resumes included.
	Record and monitor the number of students and alumni using Career and Internship Services	Annually, maintained by their office		During 2020–21 there were 126 contacts with Career and Internship services from CMGT students.
4b. Expand development and endowment opportunities				
	Update program development plan	Review twice annually with Development Officer		New College Engagement officer, Courtney Barrette, was hired January 2018 with a partial role for development. Active reengagement of an updated development plan commenced, summer 2018. ONGOING
	Identify and meet with target funders as outlined in plan	At least annually		Coordinated between Barrette and Hilger on various fundraising initiatives and connections with donors.
4c. Increase Advisory Board activities and input to program				
	Meet with full Advisory Board two times/year	Annually		Meet twice per year, and committees, when needed, more often.
	Hold committee meetings	As needed		Created Alumni Engagement special committee spring 2020 to restructure Alumni Group and reengage alumni.

	Advisory Board members to host internship presentations each semester	December, May and August		Excellent response from AB members; rotate locations throughout the year, now a regular event. ONGOING
4d. Increase outreach and friend-raising activities				
	Review program-specific marketing/media campaigns.	Annually		Change in marketing leadership for our unit in 2019 has resulted in a more structured, focused marketing plan. Now a regular part of CMGT staff meetings
	Staff membership to actively participate in CM trade associations	Peter: CMAA, CHSA, AIA, ACE		Peter: President of local CMAA chapter; President CHSA 2018–2021; Board member ACE, active participant/presenter at AIA convention representing the U of M.
	Maintain LinkedIn site	Regular updates		Regular posting of news feeds and events by Lynn Cross, Mia Boos.
	Maintain Facebook page	Regular updates		Staff members Lynn Cross and Mia Boos update CMGT facebook page and Twitter feeds regularly.
	Invite public to program events, such as internship presentations, Golden Pen competition, capstone presentations, quiz bowls	Per occurrence		Internship presentations hosted by Advisory Board members. Quiz Bowl (October), Golden Pen and Pentathlon (spring) judged by industry professionals.
	U of M Construction and FM Alumni Club	Regular Occurrence		Club dissolved and reconstituted under CCAPS administration for a more uniform program and outreach initiative.
	Alumni Database	Regular Occurrence		Maintain a database of alumni using social media links and other sources. Coordinated by Megan Seltz.
5. Contribute to the growth and improvement of the construction industry				
	Show sustainable number of graduates from program	Ongoing		CMGT Major graduates in Academic Year 2021–22. Summer 2022: 3 CMGT BASc. Spring 2022: 18 CMGT BASc. Fall 2021: 10 CMGT BASc.
	Show sustainable number of enrollments in courses	Ongoing		Summer 2022: 38 Spring 2022: 353 Fall 2021: 357
	Monitor the number of students completing minors and	Ongoing		Certificate and Minor graduates in AY 2021/22. Summer 2022: 0 Certs, 0 Minors

	certificates each year to show sustainable numbers.			Spring 2022: 6 Certs, 5 Minors Fall 2021: 3 Certs, 3 Minors
	Monitor graduate survey to record placement and graduate satisfaction	Ongoing		Complete
	Sponsor one outreach event for industry in each academic year	Variable		Hosted Career Fair, online fall 2021, Golden Pen Award Competition. Quiz Bowl, not held 2021 due to COVID.
	Create courses that meet needs for industry licensing	Ongoing		OSHA 30 (CMGT 4031 Construction Safety & Loss Control); Minnesota State Stormwater Site Management certificate (CMGT 4081 Managing Erosion and Sediment Control on Construction Sites); CMIT Option (CMGT 4861 Construction Management Capstone); FMP Option (CMGT 4861 Construction Management Capstone)
	Create a new Environmental Health and Safety track within the program	Starting fall, 2021		Approved by the Board of Regents and now in the implementation stage; enrolling a cohort model every two years starting 2021. Offered “trial” introductory coursework which was well enrolled.