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 2019–2020

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.

![Diagram of Construction Management Program Quality Assessment Cycle]

**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 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

<table>
<thead>
<tr>
<th>Assessment Tool</th>
<th>Frequency</th>
<th>Action</th>
<th>Documentation and Assessment of Effectiveness</th>
<th>Direct or Indirect Assessment</th>
<th>Appendix Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall program assessment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparison to ABET/FMAC standards</td>
<td>Semiannually</td>
<td>Department review</td>
<td>Required changes are proposed to and approved by Academic Council.</td>
<td>Direct</td>
<td>none</td>
</tr>
<tr>
<td>Student Experience in the Research University (SERU) survey</td>
<td>Biennially or when University implements</td>
<td>Department review</td>
<td>Incorporated into the Annual Report; response as needed.</td>
<td>Direct</td>
<td>A</td>
</tr>
<tr>
<td>Advisory Board and curriculum committee meetings</td>
<td>2x/year</td>
<td>Courses modified, added, or removed</td>
<td>Proposals submitted to CCAPS Academic Council; review semiannually by Advisory Board members, and subject to University Curriculum Review committee final approval</td>
<td>Indirect</td>
<td>none</td>
</tr>
<tr>
<td>Student focus groups (by odd year (since we are a two-year advanced standing program)</td>
<td>Solicited every odd year</td>
<td>Minutes taken to record suggestions</td>
<td>Minutes are filed and suggestions are considered for overall program quality improvements. Annual review of progress.</td>
<td>Direct</td>
<td>none</td>
</tr>
<tr>
<td><strong>2. Courses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty self-assessment</td>
<td>Each term after a class is taught (online)</td>
<td>Department review, objectives revised, teaching methods and exercises revised, new content and activities incorporated, textbook changed</td>
<td>Formal review process documents that faculty goals were achieved, and courses are updated as suggested.</td>
<td>Direct</td>
<td>B</td>
</tr>
<tr>
<td>ATD course review</td>
<td>After each course is taught</td>
<td>Review is provided to each instructor</td>
<td>OES follows up with each instructor to document changes made. Incorporates their own “Quality Matters” review of every course.</td>
<td>Indirect</td>
<td>B</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>APS course review</td>
<td>Every three years for established courses; after each new course is taught for the first time</td>
<td>Course objectives, activities, assessments may be revised, recorded, and filed in course review document</td>
<td>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.</td>
<td>Direct</td>
<td>B</td>
</tr>
<tr>
<td>Student Ratings of Teaching (SRT)</td>
<td>After each course section is delivered</td>
<td>Plan developed to address student concerns about faculty or course</td>
<td>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 monitored, and faculty are replaced if improvements are documented.</td>
<td>Direct</td>
<td>D</td>
</tr>
</tbody>
</table>

### 3. Students

<table>
<thead>
<tr>
<th>Academic Quality Plan</th>
<th>Annually</th>
<th>Varies for each outcome listed</th>
<th>See Academic Quality Plan</th>
<th>Direct/Indirect</th>
<th>See separate document</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student placement and career services</td>
<td>Annually</td>
<td>Improvements or changes made based on student responses</td>
<td>Placement numbers tracked from year to year. Both student satisfaction and student placement should increase each year.</td>
<td>Direct</td>
<td>C</td>
</tr>
<tr>
<td>Student Rating of Teaching (SRTs)</td>
<td>After each course section is delivered</td>
<td>Plan developed to address student concerns about faculty or course</td>
<td>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.</td>
<td>Direct</td>
<td>D</td>
</tr>
</tbody>
</table>

4. Faculty

| Student Ratings of Teaching (SRT) | 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 |

<p>| 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 |</p>
<table>
<thead>
<tr>
<th><strong>Student Experience in the Research University (SERU) Survey</strong></th>
<th>Biennially or when University implements</th>
<th>Department Review</th>
<th>Incorporated into the Annual Report; response as needed.</th>
<th>Direct</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course review/Performance review (for full-time faculty)</strong></td>
<td>Every three years for adjunct, after first time teaching for new faculty, and annually for full time faculty</td>
<td>Teaching methods revised. Goals set for next year. Employee development plan documented and agreed to by college and employee</td>
<td>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.</td>
<td>Direct</td>
<td>D</td>
</tr>
<tr>
<td><strong>5. Staff</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Performance Review</strong></td>
<td>Annually</td>
<td>Employee development plan documented and agreed to by college and employee</td>
<td>Formal review process documents goals that were achieved and allows staff and supervisors to set new goals.</td>
<td>Direct</td>
<td>D</td>
</tr>
<tr>
<td><strong>6. Advising</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>University Advising Survey</strong></td>
<td>Annually</td>
<td>Advising methods and processes revised</td>
<td>Numerical results tabulated and assessed for positive results and trends.</td>
<td>Direct</td>
<td>E</td>
</tr>
<tr>
<td><strong>Student Experience in the Research University (SERU) survey</strong></td>
<td>Biennially or when University implements</td>
<td>Department Review</td>
<td>Incorporated into the Annual Report; response as needed.</td>
<td>Direct</td>
<td>E</td>
</tr>
</tbody>
</table>
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 in 2009, 2010, 2012, 2013, 2014, 2015, 2017, and 2018; the 2020 survey was cancelled. 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 is 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. The most recent survey for which results are available was in 2017.
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 and successful teaching strategies, and identify changes which 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.
Figure A2.1. End of Semester Course Assessment Survey (2019–2020)
2. Academic Technology and Design (ATD) Course Review

In addition to instructor’s end-of-semester 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](#)
4. APS Course Review

Third, our program maintains a course review calendar (see figure A2.2). Each course is reviewed every three years by the program director, faculty directors, and faculty.

**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.

<table>
<thead>
<tr>
<th>Course:</th>
<th>Review Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reviewers: Instructor, Faculty Director, APS Program Director, OES Instructional Designer</td>
<td>Notes By:</td>
</tr>
<tr>
<td>Full Course Review Portfolio <a href="#">Here</a></td>
<td></td>
</tr>
<tr>
<td>REVIEW NOTES</td>
<td>ACTION ITEMS</td>
</tr>
<tr>
<td>Course Outcomes</td>
<td></td>
</tr>
</tbody>
</table>

**General Redesign elements**

(See also [OES Design Meeting Minutes](#))

<table>
<thead>
<tr>
<th>The following are from the OES <em>Online Course Review</em></th>
<th><em>These items to be addressed during redesign.</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Outcomes</td>
<td></td>
</tr>
<tr>
<td>Learning Activities and Assessments</td>
<td></td>
</tr>
<tr>
<td>Learning Environment</td>
<td></td>
</tr>
<tr>
<td>Learning Resources</td>
<td></td>
</tr>
<tr>
<td>Course Tools and Media</td>
<td></td>
</tr>
<tr>
<td>Instructor role</td>
<td></td>
</tr>
<tr>
<td>Scope of Revision</td>
<td></td>
</tr>
</tbody>
</table>

**Professional Development**

- See Faculty Development report
- [End of term course assessment](#) participation

**Other**

- [Resume](#): on file
- [SRTs: Student Ratings of Teaching](#)
QIP Sub-Appendix A3: Students

Career Services Graduate Outcome Survey

Each year, Career and Internship Services survey the cohort of graduating students to track their employment success immediately following graduation. Results are reported by college and program. We track this information to determine the trends in our students’ work placement and job satisfaction. Results of past surveys are available at careerhelp.umn.edu/salarystat.

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 Ratings of Teaching (SRTs) 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 (SRTs)

The University Evaluation of Teaching policy requires that every course, except internships and directed studies, is evaluated every time it is offered. Evaluation is coordinated by the Office of Measurement Services (OMS) which distributes the Student Rating of Teaching (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 http://oms.umn.edu/srt/).

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 included specific teacher and student input.

The SRT form aimed to assess teaching more holistically, and produce results relevant to the classroom experience and linked to the University student-learning outcomes. The SRT has improved how teaching is assessed by students and 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 five 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 five questions for students to rate their course and an open-ended question: “What suggestions do you have for improving this course?” with a supplemental question: “Approximately how many hours per week did you spend on homework?”

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. SRT results for all Construction Management courses for the last three years are posted below in figure A4.1.
## Program SRT Results by Academic Year

### 3 Years to Spring 2020

**Construction Management**

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Form Used</th>
<th>SRT-2015</th>
<th>Overall Mean</th>
<th>SD</th>
<th>% of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AY 2019-20</strong></td>
<td>SRT-2015</td>
<td>5.57</td>
<td>5.50</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>Instructor Questions</td>
<td>Mean 5.57</td>
<td>SD 0.77</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. The instructor was well prepared for class.</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>2. The instructor presented the subject matter clearly.</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>9%</td>
<td>29%</td>
</tr>
<tr>
<td>3. The instructor provided feedback intended to improve my course performance.</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>4%</td>
<td>15%</td>
</tr>
<tr>
<td>4. The instructor treated me with respect.</td>
<td>1%</td>
<td>1%</td>
<td>4%</td>
<td>12%</td>
<td>46%</td>
</tr>
<tr>
<td>Course Questions</td>
<td>Mean 5.43</td>
<td>SD 0.84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. I have a deeper understanding of the subject matter as a result of this course.</td>
<td>1%</td>
<td>0%</td>
<td>1%</td>
<td>8%</td>
<td>33%</td>
</tr>
<tr>
<td>2. My interest in the subject matter was stimulated by this course.</td>
<td>3%</td>
<td>6%</td>
<td>16%</td>
<td>37%</td>
<td>Mean: 5.39</td>
</tr>
<tr>
<td>3. Instructional technology employed in this course was effective.</td>
<td>0%</td>
<td>1%</td>
<td>6%</td>
<td>19%</td>
<td>36%</td>
</tr>
<tr>
<td>4. The grading standards for this course were clear.</td>
<td>1%</td>
<td>2%</td>
<td>4%</td>
<td>16%</td>
<td>39%</td>
</tr>
<tr>
<td>5. I would recommend this course to other students.</td>
<td>1%</td>
<td>1%</td>
<td>4%</td>
<td>18%</td>
<td>38%</td>
</tr>
</tbody>
</table>

**Homework:** How many hours per week do you spend on homework?

- **AY 2018-19**
  - Response Rate 409 / 781 | 52.42% |
  - Instructor Questions | Mean 5.38 | SD 1.03  |              |    |                |
  - Course Questions | Mean 5.14 | SD 1.12  |              |    |                |

- **AY 2017-18**
  - Response Rate 468 / 752 | 62.2% |
  - Instructor Questions | Mean 5.40 | SD 0.96  |              |    |                |
  - Course Questions | Mean 5.08 | SD 1.11  |              |    |                |

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

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19
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. 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 for which results are published is from 2017.

According to the survey, a majority of CCAPS students (72.6%) 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](image-url)
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 2017
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 review process is described below, and the form is shown below, figure A4.9.

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.

The CCAPS Annual Performance Review form is shown on the following pages.

University of Minnesota

Performance Evaluation – Employee Input

<table>
<thead>
<tr>
<th>Employee Name:</th>
<th>Employee ID:</th>
<th>Review Period:</th>
</tr>
</thead>
</table>

Instructions: This form will help you prepare for a productive discussion with your supervisor. This document is a tool for you to provide input to your supervisor and will not be retained with your performance evaluation.

Part 1: Goals.

Beginning of Performance Review Cycle: Set Goals
Goals should identify the most important objectives for you over the next year. Goals should be SIMple (specific, important and measurable) while describing both results and behaviors in these goals. 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.

During the Performance Review Cycle: Discuss Goals
Your supervisor and you should regularly connect to discuss the progress of the goals and to make any updates or changes to the goals as needed.

End of Performance Review Cycle: Complete Parts 2 and 3
Describe what you achieved throughout the performance review cycle, how you achieved it and the impact that it has.

Goal 1:

Goal 2:

Goal 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, non-degree-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.
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 2017 SERU survey, the most recent available, are shown below.
As indicated by figure A5.3, the majority (67.2%) of our students are satisfied or very satisfied with our academic advising.

![Educational Experience: How satisfied or dissatisfied are you with academic advising by departmental staff?](Image)

**Figure A5.3: Satisfaction with Academic Advising (Departmental Staff)**

The mean rating for CCAPS Departmental Advising was 4.83 on the SERU six-point scale, compared with a University-wide rating of 4.49.
APPENDIX B

University of Minnesota Construction Management Program

Academic Quality Plan Assessment – 2019–20

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

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

<table>
<thead>
<tr>
<th>Student Learning Outcome</th>
<th>Metric/Measure of success</th>
<th>How Achieved</th>
<th>Results for 2019-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Recognize, understand and effectively interact with stakeholder interests</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>Students can demonstrate written, oral, aural, and graphic communication skills through repetitive assessment and evaluation of industry-appropriate genre.</td>
<td>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.</td>
<td>27 assessment points 85% avg.</td>
</tr>
<tr>
<td>1.2</td>
<td>Students can lead, manage and participate in teams including those of diverse composition:</td>
<td>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.</td>
<td>11 assessment points 89% avg.</td>
</tr>
<tr>
<td>1.3</td>
<td>Students can identify the roles of individuals, companies and agencies involved in the project process</td>
<td>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.</td>
<td>21 assessment points 80% avg.</td>
</tr>
<tr>
<td>1.4</td>
<td>Using factors around health, safety, welfare, comfort, safety and security within the organization, the student can practice applications of human resource management.</td>
<td>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.</td>
<td>4 assessment points, 2 are in Capstone 90% (doesn’t include ABUS course)</td>
</tr>
<tr>
<td>1.5</td>
<td>Students can recognize the contribution of the design disciplines’ processes.</td>
<td>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.</td>
<td>16 assessment points in 9 courses; 83% avg.</td>
</tr>
<tr>
<td>2. Demonstrate ethical behavior and decision-making</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>The student can analyze professional decisions based upon ethical principles.</td>
<td>At least one assessment in four core courses will measure this competency, with at least 80% of the students receiving</td>
<td>6 assessment points in 4 courses, 89% avg.</td>
</tr>
</tbody>
</table>
### 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. 11 assessment points in 7 courses, 4 in Capstone; 84% avg.

### 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. 9 assessment points in 6 courses; 91% avg.

#### 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. 4 assessment points in two courses; 83% avg.

#### 3.4 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. 11 assessment points in 5 courses; 100% (verify 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. At least 80% of enrolled students in CMGT 4031 will earn their OSHA 30-hour safety card. 9 assessments in 2 courses; 85% avg. Most students (85%) earn their OSHA 30 as part of this course

#### 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, No data available yet. Covered in

29
| 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. | CMGT 4031 only
3 assessment points in two classes
34% (a data input error - evaluating) |
| 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 course. | No data. Covered in CMGT 4021 but not separately assessed. Part of the final project. |
| 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. | No data. 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. | 13 assessment points in 7 courses; 92% avg. |
| 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. | 11 assessment points in 7 courses; 80% avg. |
| 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. | 10 assessment points in 5 courses; 52% (re-evaluating data gathering) |
| 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. | 8 assessment points in 3 courses, including 4544 and 4545 (7). 76% avg. |
| 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. | 1 assessment point in 3001; rest in 4542, 85% avg. |
| 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. | Data not compiled yet. |
| 4.7 | Apply basic surveying techniques for construction layout and control. | At least 90% of the students enrolled in CEGE 3202 Surveying pass this course with a grade of “C” or better. | CEGE 3202 meets this competency AY2017-18: 18 of 19 students passed. |
| 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. | 7 assessment points in 6 courses; 100% (verify data) |

**5. Manage the business processes**

<p>| 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. | 13 assessment points in 7 courses; 88% avg. Internship retention rate exceeds 50% (2016: 11/14 perm offers) |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.2</td>
<td>Students can explain the history, international practices, corporate organization and roles of the Facility Management profession.</td>
<td>Assigned readings in the course textbook within CMGT 3024W Facility Programming and Design will cover this competency.</td>
<td>4 assessment points in 3 courses (ABus 3024W; CMGT 4213, 4000); not measured</td>
</tr>
<tr>
<td>5.3</td>
<td>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.</td>
<td>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.</td>
<td>3 assessment points in 2 core courses, ABUS 4211 and CMGT 4861 Capstone; 87% avg.</td>
</tr>
<tr>
<td>5.4</td>
<td>Recognize the legal implications of contract, common and regulatory law to manage a project.</td>
<td>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.</td>
<td>16 assessment points in 6 courses; 91% avg.</td>
</tr>
<tr>
<td>5.5</td>
<td>Evaluate disputes based on case facts and contract content.</td>
<td>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.</td>
<td>11 assessment points in 5 courses; 93% avg.</td>
</tr>
<tr>
<td>5.6</td>
<td>Apply analysis, budgeting, accounting, risk management, and reporting to demonstrate applications of construction and facility financial management.</td>
<td>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.</td>
<td>9 assessment points in 7 courses; 76% avg.</td>
</tr>
<tr>
<td>5.7</td>
<td>Demonstrate applications of corporate real estate finance, management and transactional execution.</td>
<td>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.</td>
<td>3 assessment points in 3 courses; 97% (verify data)</td>
</tr>
</tbody>
</table>
5.8 Demonstrates the ability to understand and to apply computer applications for facility management problem solving.

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. | 3 assessment points in 2 courses; 100% avg. (verify 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

<table>
<thead>
<tr>
<th>Student Learning Outcome</th>
<th>2014 Metrics</th>
<th>Results</th>
<th>2021 Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Graduate well-qualified students</td>
<td>Students take the CMIT exam as part of the CMGT 4861 Construction Management Capstone course.</td>
<td>14 students took the exam in spring 2020 and all passed.</td>
<td>Increase the number of students who take the CMIT test. Demonstrate a 70% passing rate.</td>
</tr>
<tr>
<td></td>
<td>Program internship places students in jobs where they receive additional education and work experience. Employers will judge if students are “well prepared” by offering them permanent positions within their companies.</td>
<td>Permanent job offers to interns are generally high. Information is reported via the internship evaluation survey.</td>
<td>Continue to increase the number of internship opportunities for students.</td>
</tr>
<tr>
<td></td>
<td>Students are hired into construction management jobs.</td>
<td>The ratio of job offers to survey respondents by Academic Year (fall–summer)</td>
<td>Increase percentage of returned internship surveys to 70%.</td>
</tr>
<tr>
<td></td>
<td>2017: 11/13 (22% response)</td>
<td>2021 Goal: Increase the number of students who take the CMIT test. Demonstrate a 70% passing rate.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2018: 10/12 (29% response)</td>
<td>Career and Internship Graduate survey</td>
<td>Begin to analyze responses, and track for years forward.</td>
</tr>
<tr>
<td></td>
<td>2019: no response to survey</td>
<td>Summer each year: 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. 2017: 90% of CMGT graduates working in paid employment. 100% in a job somewhat or closely related to the major.</td>
<td>Continue to track and show high rate of students working in the construction field. Begin monitoring data, and demonstrate positive trends moving forward.</td>
</tr>
</tbody>
</table>
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.

2. Partner with other University of MN 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)

- 2019: 238 (31%)
- 2018: 224 (28%)
- 2017: 220 (24%)

Students complete the CMGT minor: CMGT minor completion data is given below by Academic Year (fall–summer)

- 2019: 4
- 2018: 9
- 2017: 14

Students complete the CMGT certificate: CMGT certificate completion data is given below: By Academic Year (fall, spr, sum)

- 2019: 5
- 2018: 6
- 2017: 7

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

Rating of upper-division writing metrics show improvement each year. Next rating due 2021 (cancelled 2020 due to COVID)

Increase the number of students from other colleges enrolled in courses.

Participate in the University-wide Minors Fair every fall.

Last metric: Target the number of certificate applications to 8 in 2016.

Hold two intercollege events per year: Quiz Bowl/Career Fair in October; Pursuit Competition event in April

2019/20: U of M was finalist in Quiz Bowl, and won the Pursuit Competition.
Advisory board members include representatives from other colleges.

The CMGT Advisory Board includes a representative from the College of Science and Engineering.

CMGT faculty serve on advisory boards for other college departments.

Advisory Board Company List
CMGT faculty (Ann Johnson) serves on the Civil Engineering advisory board.

3. Collaborate with regional CMGT programs to serve industry
Sponsor joint events with regional CMGT programs through Construct*ium.
CMGT attends the monthly meeting, held for the last two years, that includes representatives from all regional CMGT programs.
CMGT staff and students have participated in three MCA golf scholarship fundraisers with representatives from other regional CMGT programs.
Annual Quiz Bowl held each October including teams from four to six regional colleges.
Annual Intercollegiate Career Fair held each October, with invited students from nine regional schools.
Annual Pentathlon Soft Skills Competition, with invited students from nine regional schools (every two odd years)
In 2014 the CMGT program, in collaboration with midwest construction management programs, organized the Upper Midwest Collegiate

Continue as is.
UMN staff participate on regional CMGT boards. Peter Hilger serves on the Advisory Board for Dakota Technical Community College, a two-year feeder program.

4. Develop industry relationships to support students
   Construction League (Construct*ium).
   UMN staff participate on regional CMGT boards.

4. Develop industry relationships to support students
   
   **CMGT program maintains a database of 700+ employer contacts.**
   Database continued to be increased, updated and revised.
   
   **CMGT program maintains an active advisory board made up of representatives from all industry segments and potential employers.**
   Our Advisory Board has 43 voting members. Membership is drawn from general contractors, heavy engineering, subcontractors, owner reps, non-profits, associations, and consultancies.
   
   **CMGT program requires an internship by all students. CMGT program assists students in obtaining internship positions by facilitating “virtual job fair.”**
   CMGT program emails all internship candidate resumes to our database of potential employers every Spring (Virtual Career Fair).
   
   **5. Contribute to growth and improvement of the construction industry**
   
   **CMGT program sponsors outreach and informational activities aimed at industry professionals.**
   CMGT program sponsored white paper discussion on Best Value in 2009, attended by over 50 industry professionals.
   
   **Continue membership on Dakota Tech Advisory Board.**
   
   **Maintain database, augment with new contacts annually.**
   Increase membership to 45 active members.
   
   **Continue, but increase number of potential employers by 5% per year.**
   
   
   Faculty Jain and Hilger have presented weeklong technical seminars on project management themes each of 2017 and 2018 for the NOAA Kansas City Office.
Hilger is an editorial contributor for Construction Business Owner magazine.

Hilger has published a white paper, *Communication, the Bedrock of Construction*, for *Construction Business Owner* magazine.

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.

CMGT program offers a stormwater training program to construction professionals in need of certification.

CMGT 4081: Managing Erosion and Sediment Control on Construction Sites

Registration:

- **Spring 2020**: 14
  (13 CCAPS, Other colleges 1)
- **Spring 2019**: 14
  (11 CCAPS, Other colleges 3)
- **Spring 2018**: 21
  (20 CCAPS, Other colleges 1)

Increase number of enrolled students in CMGT 4081.
APPENDIX C

University of Minnesota Construction Management Program

Annual Plan* 2019-20

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.  
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 |  
Maintain IFMA/ABET accreditation: file annual report and renewal | Annually in fall | Full reaccreditation achieved 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 annual course reviews As scheduled Steve Wandler coordinates for all courses, but departed University Spring 2020. Position and role currently in transition.

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 adopting to online for COVID. All courses 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. Excellent results achieved, second spring section now being considered.

Develop specialized Math course to replace Calculus Requirement 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 is 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 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.

1) Advising survey sent at end of each semester to graduating students.
2) College does a Satisfaction survey biennially including advising questions. (NO CHANGE)

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)

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 2019–20, 43% (10/23) completed within two years (6 semesters) of entering the program.

### 1e. Student Development

<table>
<thead>
<tr>
<th>Task</th>
<th>Frequency</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support CFMSA financially and administratively</td>
<td>Annually</td>
<td>Attend meetings, fund expenses</td>
</tr>
<tr>
<td>Identify and support participation of CFMSA in one student competition each year</td>
<td>Annually</td>
<td>CFMSA is the host organization and participates in the Intercollegiate Quiz Bowl Event, held in conjunction with the Career Fair in October.</td>
</tr>
<tr>
<td>Participate as a college and program in Homecoming</td>
<td>Annually in fall</td>
<td>Annually participating as a College</td>
</tr>
<tr>
<td>Host a Sigma Lambda Chi Student Chapter</td>
<td>Fall 2017</td>
<td>Maintain chapter affiliation in good standing.</td>
</tr>
<tr>
<td>Host a Toastmasters Club with students and alumni participation</td>
<td>Ongoing</td>
<td>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</td>
</tr>
</tbody>
</table>
### 1f. Faculty Development

<table>
<thead>
<tr>
<th>Activity</th>
<th>Frequency</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide faculty development workshops at two faculty meetings each year by Online and Educational Services (OES)</td>
<td>Ongoing</td>
<td>Portion of each faculty meeting devoted to technical or learning support and development. (NO CHANGE)</td>
</tr>
<tr>
<td>Develop Moodle/Canvas resources on Homebase and provide additional resources for faculty (such as Tuesday Teaching Tips)</td>
<td>Regularly updated</td>
<td>Regularly supported by ODL and updated. (NO CHANGE)</td>
</tr>
<tr>
<td>Make seminars and resources available to our faculty through the Center for Teaching and Learning (CTL) or Office of Information Technology (OIT)</td>
<td>Regular notice of upcoming events</td>
<td>Ongoing (NO CHANGE)</td>
</tr>
<tr>
<td>Avail individual consulting on course design and management to all faculty through ATD</td>
<td>Faculty are regularly notified by email and at each faculty meeting</td>
<td>Usually provided during the Canvas course updates prior to the start of a new semester.</td>
</tr>
</tbody>
</table>

### 1g. Become active members of ASC and IFMA

<table>
<thead>
<tr>
<th>Activity</th>
<th>Frequency</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain ASC membership and facilitate student participation in competitions</td>
<td>Annually</td>
<td>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.</td>
</tr>
<tr>
<td>Participate in the IFMA annual chapter symposium and several local chapter meetings</td>
<td>Annually in spring</td>
<td>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</td>
</tr>
</tbody>
</table>

### 2. Partner with the University College of Design, College of Science and Engineering, and Housing Studies program to serve the construction industry

<table>
<thead>
<tr>
<th>Activity</th>
<th>Frequency</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate information about career fair to CSE and CDES students and advisors; provide information about courses to advisors in CSE and CDES regarding our courses,</td>
<td>Annually in fall semester</td>
<td>Held FM information presentation in Interior Design classes (Justine Pliska) spring 2019. Collaborated with BBE, now SSM, for 2018/19 Race-to-Zero competition.</td>
</tr>
</tbody>
</table>
and present at CSE and CDES advisor meetings each fall

Monitor enrollments by students from CDES and CSE Annually in May and December

Assess first delivery of BIM course, CMGT 4003 Managing in the BIM Environment First offered in fall 2014, repeated every two years

Registrations:
Fall 2020: 21
Fall 2019: Offering postponed
Fall 2017: 9

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)
Ongoing (NO CHANGE)

Participate in scheduled Construct*ium conference calls Always, when scheduled by MCA
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.
Held October each year, sponsored by Construct*ium, organized by U of M.
Cancelled fall 2020 due to COVID.

Support and organize annual Intercollegiate Quiz Bowl in October Annually first Friday in October
Very successful, Fall 2019 event attended by 10 upper midwest universities, 73 employers, over 200 students.
Held October each year, sponsored by Construct*ium, organized by U of M.
Cancelled fall 2020 due to COVID.

Support and organize Intercollegiate Built Environment Career Fair in October Annually first Friday in October

Serve on Dakota Tech Advisory Board 2–4 times/year
Attended to by Hilger and Seltz. ONGOING

Facilitate student tour Variable frequency
XCEL Energy Plant in 2019. This role has been transferred to CFMSA with CCAPS staff assistance.

4. Develop industry relationships to support student contact with industry mentors, internships, and
4a. Develop internship opportunities for CMGT students

Modify student preparation for internship program through webinar
Conduct internship evaluations for both students and employers
Expand internship employer database
Distribute virtual career fair packet to prospective employers in employer database
Record and monitor the number of students and alumni using Career and Internship Services

- **Modify student preparation for internship program through webinar:** Annually in fall
- **Conduct internship evaluations for both students and employers:** Annually upon completion of Internship session in December, May, and August
- **Expand internship employer database:** Regular employer contact
- **Distribute virtual career fair packet to prospective employers in employer database:** Annually in February
- **Record and monitor the number of students and alumni using Career and Internship Services:** Annually, maintained by their office

**Released and on website, also hosted a preparation session for Career Fair to CFMSA students.**
**Online survey through GoldPass.**
**Limited response obtained.**

**Contacts as of September 1, 2020: 751**

February each year. Last issued February 2020.

During 2019–20 there were 125 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
- **Identify and meet with target funders as outlined in plan:** At least annually

New College Engagement officer, Courtney Barrette, was hired January 2018 with a partial role for development. Active re-engagement of an updated development plan commenced, summer 2018. ONGOING

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 2 times/year
Hold committee meetings As needed
Advisory Board members to host internship presentations each semester

- **Meet with full Advisory Board 2 times/year:** Annually
- **Hold committee meetings:** As needed
- **Advisory Board members to host internship presentations each semester:** December, May and August

Meet twice per year, and committees, when needed, more often.
Created Alumni Engagement special committee spring 2020 to restructure Alumni Group and re-engage alumni.
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/promotion plan

- **Review program-specific marketing/promotion plan:** Annually

Change in marketing leadership for our unit in 2019 has resulted in a more
<table>
<thead>
<tr>
<th>Activity</th>
<th>Frequency</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff membership to actively participate in CM trade associations</td>
<td>Regular updates</td>
<td>Peter: President of local CMAA chapter; President CHSA 2018–2021; Board member ACE, active participant/presenter at AIA convention representing the U of M.</td>
</tr>
<tr>
<td>Maintain LinkedIn site</td>
<td>Regular updates</td>
<td>Regular posting of news feeds and events by Lynn Cross, Kelli Billstein.</td>
</tr>
<tr>
<td>Maintain Facebook page</td>
<td>Regular updates</td>
<td>Staff members Lynn Cross and Kelli Billstein update CMGT facebook page Google+ Community and Twitter feeds regularly.</td>
</tr>
<tr>
<td>Invite public to program events, such as internship presentations, Golden Pen competition, capstone presentations, quiz bowls</td>
<td>Per occurrence</td>
<td>Internship presentations hosted by Advisory Board members. Quiz Bowl (October), Golden Pen and Pentathlon (spring) judged by industry professionals.</td>
</tr>
<tr>
<td>U of M Const and FM Alumni Club</td>
<td>Regular Occurrence</td>
<td>Club dissolved and reconstituted under CCAPS administration for a more uniform program and outreach initiative. New structure and Board being constituted in conjunction with the Advisory Board.</td>
</tr>
<tr>
<td>Alumni Database</td>
<td>Regular Occurrence</td>
<td>Maintain a database of alumni using social media links and other sources. Coordinated by Megan Seltz.</td>
</tr>
</tbody>
</table>

5. Contribute to the growth and improvement of the construction industry

<table>
<thead>
<tr>
<th>Activity</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Show sustainable number of graduates from program</td>
<td>Ongoing</td>
<td>CMGT Major graduates in Academic Year 2019/20. Summer 2020: 4 CMGT BASc Spring 2020: 16 CMGT BASc Fall 2019: 3 CMGT BASc</td>
</tr>
<tr>
<td>Show sustainable number of enrollments in courses</td>
<td>Ongoing</td>
<td>Summer 2020: 23 Spring 2020: 393 Fall 2019: 354</td>
</tr>
<tr>
<td>Monitor the number of students completing minors and certificates each year to show sustainable numbers.</td>
<td>Ongoing</td>
<td>Certificate and Minor graduates in AY 2019/20. Sum 2020: 0 Certs, 0 Minors Spr 2020: 5 Certs, 4 Minors Fall 2019: 0 Certs, 0 Minors</td>
</tr>
<tr>
<td>Task</td>
<td>Status</td>
<td>Details</td>
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<td>----------------------------------------------------------------------</td>
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<tr>
<td>Monitor graduate survey to record placement and graduate satisfaction</td>
<td>Ongoing</td>
<td>Complete</td>
</tr>
<tr>
<td>Sponsor one outreach event for industry in each academic year</td>
<td>Variable</td>
<td>Hosted Career Fair, fall 2019, Quiz Bowl, Golden Pen Award Competition.</td>
</tr>
<tr>
<td>Create courses that meet needs for industry licensing</td>
<td>Ongoing</td>
<td><strong>OSHA 30</strong> (CMGT 4031 Construction Safety &amp; Loss Control);</td>
</tr>
<tr>
<td>Create a new Environmental Health and Safety track within the program</td>
<td>Starting fall, 2021</td>
<td><strong>Minnesota State Stormwater Site Management certificate</strong> (CMGT 4081 Managing Erosion and Sediment Control on Construction Sites); <strong>CMIT Option</strong> (CMGT 4861 Construction Management Capstone); <strong>FMP Option</strong> (CMGT 4861 Construction Management Capstone) Approved by the Board of Regents and now in implementation stage; enrolling a cohort model every two years starting 2021. Offered “trial” introductory coursework which was well enrolled.</td>
</tr>
</tbody>
</table>