Academic Quality Plan

Master of Science in Construction Management

Department of Construction Science

College of Architecture
Texas A&M University
August 18, 2020
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1. Introduction

1.1 The following is the Academic Quality Plan for the Master of Science in Construction Management (MSCM) graduate degree program at Texas A&M University (TAMU). This plan was developed in accordance with the requirements set forth by Texas A&M University and the American Council for Construction Education (ACCE), the accrediting body of the Construction programs.

1.2 This is a comprehensive plan for quality improvement of the MSCM program and its students through development and assessment of educational program objectives as well as student learning outcomes through direct and indirect measures of student achievement.

1.3 The educational program objectives are derived from the department’s mission. Graduate student learning outcomes (GSLOs) are derived from the educational program objectives and ACCE guidelines.

1.4 The plan will be reviewed and updated periodically as justified.

2. Department Mission

2.1 The Department of Construction Science is dedicated to education, discovery, development and application of knowledge in the field of construction while fulfilling the land grant mission of Texas A&M University and enhancing the economic development of the State of Texas. Our mission of providing the highest quality undergraduate and graduate programs is inseparable from our mission of developing new understanding through teaching, research and service. We prepare students to assume roles in leadership, responsibility, and service to society.

3. Supporting Documents

3.1 This Academic Quality Plan is an integral part of, and is supported by, the following:

3.1.1 The current version of the Department Strategic Plan,
3.1.2 The Department’s University Assessment Plan and Report, and
3.1.3 The annual COSC Academic Quality and Assessment Implementation Report.
4. Texas A&M System Student Learning Outcomes

4.1 The Texas A&M System developed a common set of Student Learning Outcomes (SLOs) that allow the system to hold all its member institutions accountable for student success. The six Texas A&M System SLOs are: 

http://empoweru.tamus.edu/student-learning-outcomes/

- **Ethical & Social Responsibility** – “Students will articulate multiple cultural perspectives in local, national and global communities. Students will identify and analyze social and ethical challenges, including possible resolutions.”

- **Globalization & Diversity** – “Students will utilize multidisciplinary perspectives to evaluate initiatives that have been employed to address global issues. Students will describe the nature of global interdependence.”

- **Specific Knowledge** – “Students will perform satisfactorily on licensure or certification exams necessary for professional status within their chosen careers, where applicable. Students will demonstrate skills required for success.”

- **Integration** – “Students will demonstrate mastery of the general education core curriculum. Students will apply broad knowledge to academic disciplines and professional or technical fields.”

- **Communication** – “Students will use multiple formats and technologies to communicate ideas effectively in large and small group settings. Students will apply fundamental writing strategies such as invention, drafting …”

- **Problem Solving/Critical Thinking** – “Students will construct well-supported, clearly articulated and sustained arguments. Students will demonstrate an ability to justify conclusions based on evidence. Students will interpret, analyze, and evaluate.”

http://empoweru.tamus.edu/student-learning-outcomes/
5. **Texas A&M University Institutional Student Learning Outcomes: Master’s Degrees**

The university developed over-arching student learning outcomes which “summarize the knowledge and skills Texas A&M expects students to gain during their educational experience as Aggies. These learning outcomes ask students to connect their course- and degree-level learning to their overall goals as they take on leadership positions in their professions and communities, and prepare them to engage in learning for a lifetime.

First and foremost, Texas A&M expects students to have mastered the material presented in their individual courses, from entry-level general education courses required of all undergraduates, to capstone courses restricted to seniors in a major, to specialized graduate seminars.

The broader institutional student learning outcomes ask students to connect the pieces of their education into a whole that synthesizes what they have learned. Students graduate not only knowing facts and understanding basic concepts, but also demonstrating an ability to apply and explain those facts and concepts creatively in new situations. Through this process, students gain the skills and knowledge that allow them to thrive in our complex world.”

(Texas A&M University Office of Institutional Effectiveness [http://catalog.tamu.edu/graduate/university-information/#studentlearningoutcomestext](http://catalog.tamu.edu/graduate/university-information/#studentlearningoutcomestext))

5.1 **The seven university-level student learning outcomes are:**

- Master degree program requirements, including theories, concepts, principles and practice, and develop a coherent understanding of the subject matter through synthesis across courses and experiences.
- Apply subject matter knowledge in a range of contexts to solve problems and make decisions.
- Use a variety of sources and evaluate multiple points of view to analyze and integrate information and to conduct critical, reasoned arguments.
- Know how to communicate effectively.
- Use appropriate technologies to communicate, collaborate, conduct research and solve problems.
- Develop clear research plans and conduct valid (data-supported), theoretically consistent and institutionally appropriate research.
- Choose ethical courses of action in research and practice.
6. MSCM Graduate Student Learning Outcomes (GSLOs)

The Department of Construction Science (COSC) adopted the 10 graduate student learning outcomes (GSLOs) identified in ACCE Document 103M to describe the skills and knowledge students are expected to know and be able to perform at the time of graduation from the MSCM program at TAMU. The 10 graduate student learning outcomes (GSLOs) describe the skills and knowledge students are expected to know and be able to execute upon graduation from the MSCM program at TAMU. The 10 MSCM GSLOs directly support the Texas A&M University Institutional student learning outcomes for Master’s degree programs as illustrated in Figure 1.

The Department of Construction Science operationally defined each of the ten ACCE GSLOs. The operational definition of each GSLO provides a broad categorization of the knowledge and skills graduates with a Master of Science – Construction Science from Texas A&M University will possess for each of GSLO. Upon graduation, all MSCM students will:

SLO 1: Create effective and professional written communications.
• Summarize information into appropriate and concise format
• Format professional communications
• Use language and content appropriate to audience
• Deliver correct information

SLO 2: Apply critical thinking.
• Use a variety of sources and evaluate multiple points of view to analyze and integrate information and to conduct critical, reasoned arguments*

SLO 3: Apply problem solving techniques.
• Apply subject matter knowledge in a range of contexts to solve problems*

SLO 4: Apply decision making techniques.
• Apply subject matter knowledge in a range of contexts to make decisions*

SLO 5: Apply research methods.
• Develop clear research plans*
• Conduct valid (data-supported), theoretically consistent and institutionally appropriate research*

SLO 6: Apply advanced communication technology.
• Tailor language and message to the communication medium used and audience addressed
• Demonstrate appropriate use of technologies to communicate, collaborate, conduct research, and solve problems*
SLO 7: Apply professional ethics.
   - Choose ethical courses of action in research and practice*

SLO 8: Apply advanced construction management practices.
   - Compare different project delivery methods and select the most effective method
   - Select appropriate means and methods for a construction project
   - Analyze construction documents for planning and management of construction processes
   - Understand construction quality assurance and control
   - Understand project control procedures and inputs

SLO 9: Understand risk management.
   - Identify and understand different types of risk
   - Understand techniques for risk shifting and mitigation
   - Quantify risk

SLO 10: Understand the principles of leadership in business.
   - Understand the training, experience, and qualifications of various parties involved in the construction project
   - Identify the parties involved, relationships, impacts, and responsibilities of each
   - Demonstrate appropriate verbal and non-verbal communication skills
   - Understand difference between leadership and management

* Adopted from Texas A&M University Master level Student Learning Outcomes
https://catalog.tamu.edu/graduate/university-information/#studentlearningoutcomestext
Figure 1. Flow Chart of Texas A&M University System and Texas A&M University Student Learning Outcomes to MSCM Student Learning Outcomes
7. **Distribution of Graduate Student Learning Outcomes (GSLOs)**

The identified graduate student learning outcomes (1-10) are distributed throughout the program to ensure that outcome are addressed and assessed. In some courses where concepts are practiced, students are not only assessed for what they have learned in that particular course’s course objectives, but are also assessed in order to measure their proficiency in selected student learning outcomes.

The curriculum has been designed to ensure student learning outcomes are fulfilled. Table 1 illustrates the contribution of individual courses in the MSCM curriculum to the achievement of student learning outcomes. At the Master’s degree level, an “I” indicates introduction of the GSLO through the course content to create an awareness or basic understanding of the idea or concept. An “R” indicates courses in which skills and concepts contributing to the student learning outcome are reinforced. Reinforcement of the GSLO may be in the form of creating a deeper understanding of relevant knowledge and skills and/or providing practice in the practical application of the skills or concepts and would be appropriate for the lower levels of Bloom’s Taxonomy of applying and understanding. A “D” indicates courses in which skills and concepts contributing to the GSLO are demonstrated. Demonstration of an GSLO indicates mastery of a concept and would be appropriate for the higher levels of Bloom’s Taxonomy of creating, evaluating, and analyzing.

7.1 **Direct and Indirect Assessment Matrix**

The comprehensive assessment plan of direct and indirect assessment for each of the ten graduate student learning outcomes (GSLOs) is graphically represented in the *Distribution of Student Learning Outcomes and Assessment in MSCM Curriculum* matrix (Table 1) below. In the table, a “DA” designation indicates the course in which the GSLO will be assessed using a direct assessment method. An “IA” designation indicates where an indirect assessment method will be used for the GSLO.
Table 1: Distribution of graduate student learning outcomes (GSLOs) throughout the courses offered in the MSCM program

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Cr. Hrs.</th>
<th>Student Learning Outcomes**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>I = Introduced</td>
</tr>
<tr>
<td>COSC 601</td>
<td>Construction Practices</td>
<td>3</td>
<td>R</td>
</tr>
<tr>
<td>COSC 602</td>
<td>Construction Estimating</td>
<td>3</td>
<td>R</td>
</tr>
<tr>
<td>COSC 603</td>
<td>Construction Scheduling</td>
<td>3</td>
<td>D DA</td>
</tr>
<tr>
<td>COSC 606</td>
<td>Mechanical &amp; Electrical</td>
<td>3</td>
<td>R</td>
</tr>
<tr>
<td>COSC 608</td>
<td>Structures</td>
<td>3</td>
<td>R</td>
</tr>
<tr>
<td>COSC 620</td>
<td>Construction Operations</td>
<td>3</td>
<td>R</td>
</tr>
<tr>
<td>COSC 621</td>
<td>Advanced Project Management</td>
<td>3</td>
<td>D</td>
</tr>
<tr>
<td>COSC 622</td>
<td>Construction Economics</td>
<td>3</td>
<td>R</td>
</tr>
<tr>
<td>COSC 624</td>
<td>Construction Business Development</td>
<td>3</td>
<td>R</td>
</tr>
<tr>
<td>COSC 628</td>
<td>Construction Contracts &amp; Risk</td>
<td>3</td>
<td>D DA</td>
</tr>
<tr>
<td>COSC 631</td>
<td>Adv. Productivity &amp; Lean</td>
<td>3</td>
<td>D DA</td>
</tr>
<tr>
<td>COSC 642</td>
<td>Construction Information Technology</td>
<td>3</td>
<td>R</td>
</tr>
<tr>
<td>COSC 644</td>
<td>Advanced Construction Systems</td>
<td>3</td>
<td>R</td>
</tr>
<tr>
<td>COSC 650</td>
<td>Adv. Construction Visualization</td>
<td>3</td>
<td>R</td>
</tr>
<tr>
<td>COSC 663</td>
<td>Sustainable Construction</td>
<td>3</td>
<td>D DA</td>
</tr>
<tr>
<td>COSC 670</td>
<td>Facility Management</td>
<td>3</td>
<td>D</td>
</tr>
<tr>
<td>COSC 681</td>
<td>Seminar</td>
<td>1</td>
<td>R</td>
</tr>
<tr>
<td>COSC 684</td>
<td>Professional Internship</td>
<td>3</td>
<td>R</td>
</tr>
</tbody>
</table>

** I = Introduced, R = SLO Reinforced, D = SLO Demonstrated, DA = DIRECT ASSESSMENT, IA = INDIRECT ASSESSMENT.
DISTRIBUTION OF GRADUATE STUDENT LEARNING OUTCOMES AND ASSESSMENT IN MSCM CURRICULUM

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Cr. Hrs.</th>
<th>Student Learning Outcomes**</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSC 689</td>
<td>Construction Accounting and Financial Management</td>
<td></td>
<td>D</td>
</tr>
<tr>
<td>COSC 685</td>
<td>Directed Studies</td>
<td>1 - 6</td>
<td>R</td>
</tr>
<tr>
<td>COSC 689</td>
<td>Special Topics*</td>
<td>3</td>
<td>R</td>
</tr>
<tr>
<td>COSC 690</td>
<td>Theory of Research in C.M.</td>
<td>3</td>
<td>D</td>
</tr>
<tr>
<td>COSC 691</td>
<td>Research</td>
<td>4+</td>
<td>R</td>
</tr>
<tr>
<td>COSC 693</td>
<td>Professional Study</td>
<td>2+</td>
<td>R</td>
</tr>
<tr>
<td>Student Exit Survey</td>
<td>Student Exit Survey</td>
<td></td>
<td>IA</td>
</tr>
</tbody>
</table>

** SLO numbered 1 – 10 in this table may be found in Section 6.

* - Vary by course content.

7.2 Internal Assessment Tools

Various tools will be used internally to assess graduate student learning outcomes (GSLOs). The key to determining whether outcomes are being met is to develop quantitative measures of student performance that span the ten outcomes listed above. Tools for internal assessment of outcomes follow.

The primary course-level assessment tool used in the MSCM program will include, but not be limited to, examinations, reports, projects, or a combination thereof in each course.

Data collection will occur once per year in either the Fall or Spring semester. Because each GSLO describes a knowledge-base which may be comprised of more than one component, direct assessment may occur using a combination of assignments, projects, and/or exams, as appropriate, either in whole or in part from either a single course or a combination of courses.

Performance criteria for each of the ten GSLOs will be set at 80% of students will have an 80% or higher average score. The average score will comprise either an assessment or combination of assessments of student performance on assignments, projects, exams, and/or presentations on either a question-by-question basis and/or on a topic-by-topic basis, as appropriate, from identified courses.
7.3 Course and Assessment Tools Used for Direct Assessment of Graduate Student Learning Outcomes (GSLOs)

The combination of courses and assessment tools used to assess each of the ten GSLOs is described below:

**GSLO #1: Create effective and professional written communications:** Direct assessment will occur using a combination of assignments (in whole or in part) from COSC 628 (Construction Contracts and Risk Management).

**GSLO #2: Apply critical thinking:** Direct assessment will occur using a combination of assignments (in whole or in part) from COSC 603 (Construction Scheduling).

**GSLO #3: Apply problem solving techniques:** Direct assessment will occur using a combination of assignments (in whole or in part) from COSC 663 (Sustainable Construction).

**GSLO #4: Apply decision making techniques:** Direct assessment will occur using a combination of assignments (in whole or in part) from COSC 631 (Advanced Productivity and Lean Construction).

**GSLO #5: Apply research methods:** Direct assessment will occur using a combination of assignments (in whole or in part) from COSC 690 (Theory of Research in Construction Management).

**GSLO #6: Apply advanced communication technology:** Direct assessment will occur using a combination of assignments (in whole or in part) from COSC 621 (Advanced Project Management) and COSC 650 (Advanced Construction Visualization).

**GSLO #7: Apply professional ethics:** Direct assessment will occur using a combination of assignments (in whole or in part) from COSC 690 (Theory of Research in Construction Management).

**GSLO #8: Apply advanced construction management practices:** Direct assessment will occur using a combination of assignments (in whole or in part) from COSC 621 (Advanced Project Management).

**GSLO #9: Understand risk management:** Direct assessment will occur using a combination of assignments (in whole or in part) from COSC 628 (Construction Contracts and Risk Management).

**GSLO #10: Understand the principles of leadership in business:** Direct assessment will occur using a combination of assignments (in whole or in part) from COSC 670 (Facility Management).
7.4 Graduate Student Learning Outcome (GSLO) Data Collection and Notebook

At the conclusion of each semester, course assessment data will be collected by each instructor and forwarded to the Assessment Program Coordinator. To document course-level assessment tools used to assess student learning for each GSLO, the data for each graduate student learning outcome will be maintained in an electronic file referred to as a GSLO Notebook. The GSLO Notebooks for each of the ten graduate student learning outcomes will be maintained by the Assessment Program Coordinator.

The GSLO Notebook will contain:

7.4.1 A brief summary of the knowledge or skills assessed for each GSLO.
7.4.2 An assessment of student performance on a question-by-question basis or, alternatively, on a topic-by-topic basis that will include comparisons between student achievement and established metrics for the questions or topics covered in the assessment tools.
7.4.3 Identification of GSLO deficiencies and potential curriculum gaps based on direct assessment of student-level assessment tools.
7.4.4 Relevant assessment material from the appropriate course.

7.4.4.1 Assessment material may take the form of:
   7.4.4.1.1 Exams
   7.4.4.1.2 Quizzes
   7.4.4.1.3 Assignments
   7.4.4.1.4 Projects
   7.4.4.1.5 Presentations
   7.4.4.1.6 Etc.

7.4.5 For each assessment tool submitted, instructors will provide:
   7.4.5.1 An example of a student artifact sans individual student identifiers
   7.4.5.2 Student scores (grades) for the assessment tool sans individual student identifiers
   7.4.5.3 The assignment used for assessment
   7.4.5.4 The assignment rubric

The GSLO notebook will document the extent each student learning outcome described in Section 6 has been met.

8. Exit surveys

An exit survey opportunity will be given to all MSCM students immediately prior to their graduation, soliciting their opinions with respect to their educational experiences at TAMU. A 50% response rate is expected. The survey contains questions regarding the graduate student learning outcomes (GSLOs) and the responses will be used to assess and evaluate these GSLOs and to formulate plans for taking corrective action or for making improvements.

8.1 Students will be asked to use a Likert-Type scale to self-assess their level of confidence in their ability to perform each of the 10 GSLOs at the appropriate Bloom's Taxonomy level. (4 = Very Confident; 3 = Confident; 2 = Somewhat Confident; 1 = Not Confident).

8.1.1 For each GSLO, the targeted performance criteria will be set at a minimum
average score of 2.51, indicating students are, at minimum, “confident” applying individual GSLOs.

8.2 Students will be asked to use a Likert-Type scale to self-assess how important they believe each of the 10 GSLOs will be in their future careers. Responses will utilize a four point Likert-type scale (4 = Very Important; 3 = Important; 2 = Somewhat Important; 1 = Not Important).

8.2.1 For each GSLO, the targeted performance criteria will be set at a minimum average score of 2.51, indicating students believe, at minimum, the individual GSLO is “Important” in their future careers.

8.3 Students will be asked to use a Likert-Type scale to self-assess their agreement with the statement “I am satisfied with my education and choice of Construction Management as a Master’s degree.” Responses will utilize a five point Likert-type scale (5 = Strongly Agree; 4 = Agree; 3 = Uncertain; 2 = Disagree; 1 = Strongly Disagree).

8.3.1 The targeted performance criteria will be set at a minimum average score of 3.51, indicating students, at minimum, agree they are satisfied with their education and choice of Construction Science as a major.

8.4 Students will be asked to use a Likert-Type scale to self-assess their agreement with the statement “I am satisfied with the experience I gained in my professional internship course (COSC 684).” Responses will utilize a five point Likert-type scale (5 = Strongly Agree; 4 = Agree; 3 = Uncertain; 2 = Disagree; 1 = Strongly Disagree).

8.4.1 The targeted performance criteria will be set at a minimum average score of 3.51, indicating students, at minimum, agree they are satisfied with the experience they gained in their professional internship course.

8.5 The Industry Relations Coordinator and Graduate Program Coordinator, in conjunction with the Assessment Coordinator, have several responsibilities with regard to the graduate student exit surveys:

8.5.1 Annually review and update the questions used in the survey to ensure questions correlate with the current list of objectives and outcomes.

8.5.2 Tabulate the responses. This data shall be summarized in the annual COSC Assessment Report.
9. **External Assessment Tools**

Various tools will be used externally to assess graduate student learning outcomes (GSLOs). The key to determining whether outcomes are being met is to develop quantitative measures of student performance that span the ten GSLOs in Section 6. Tools for external assessment of outcomes follow.

9.1 **Former Student Surveys**

Former student surveys are sent to all TAMU graduates every five years. The survey contains questions regarding the educational program objectives and student learning outcomes. Results of former student responses will be used to guide programmatic changes through corrective action or improvements.

Data will be collected so responses may be grouped by “years since obtaining degree” in order to identify perspectives from respondents at different stages in their professional careers (i.e. those transitioning from entry-level positions, to more responsible positions, to senior positions).

- Former students will be asked to self-assess the Bloom’s Taxonomy level they have had to know, and/or perform, during the course of their career for each of the knowledge and skills contained in the 10 graduate student learning outcomes. (4 = Create; 3 = Analyze; 2 = Apply; 1 = Understand).

- To understand the importance of construction topics to former students’ careers, former students will be asked to self-assess how frequently they use construction course topics (inclusive of the knowledge and skills contained in the 10 student learning outcomes) in their careers. (6 = More than once a week, 5 = About once a week, 4 = Two to three times a month; 3 = About once a month; 2 = A few times; 1 = Not at all).

9.1.3 Former students will be asked if they are satisfied with their education and choice of Construction Management as a major.

9.1.3.1 At least 60% of former students responding will indicate satisfaction.

9.1.4 The Industry Relations Coordinator and Graduate Program Coordinator in conjunction with the Assessment Coordinator, have several responsibilities with regard to the former student surveys:

9.1.4.1 Prior to administration of each survey, review and update the questions used in the survey to ensure that they correlate with the current list of objectives and outcomes.

9.1.4.2 Tabulate the responses. This data shall be summarized in the annual COSC Assessment Report for the year in which the survey is conducted.
9.2 Job placement records

9.2.1 Job placement records are a measure of the educational value received by COSC students as perceived by employers. Although not specifically linked to any listed objective or outcome, the placement records are a measure of how the MSCM program is doing with respect to the overall mission. A summary of the placement records will be tracked on an annual basis to formulate plans for taking corrective action or for making improvements.

9.2.2 The Industry Relations Coordinator shall obtain placement data for the graduating graduate students each year. This data shall be summarized in the annual COSC Assessment Report.

9.2.3 The department will maintain a placement rate for the graduating graduate students seeking employment that is competitive with the placement rates of the best programs in construction.

9.2.4 The starting base salary of graduating graduate students shall be competitive with salaries in related disciplines and the best programs in construction.

9.3 Construction Industry Advisory Council reviews and feedback

9.3.1 The Department will hold meetings at least twice per year with members of the Construction Industry Advisory Council (CIAC). One of the main tasks of the CIAC is to assess the MSCM program with respect to the educational program objectives and student learning outcomes.

9.3.2 All courses will undergo an in-depth review of course objectives, student learning outcomes, topics, and content by industry every three years.

9.3.2.1 CIAC members will report to the Department Head that they are satisfied overall.

9.3.3 Once each year CIAC members will meet with student focus groups to obtain feedback from the students’ perspective of the graduate program.

9.3.3.1 CIAC members will report to the Department Head that they are satisfied overall.

9.3.4 The Industry Relations Coordinator will prepare meeting minutes that will document the content of the discussions and will highlight specific recommendations that will be addressed and implemented to improve the MSCM program. In particular, the minutes shall reflect any input the CIAC members may give to the MSCM Program regarding curriculum changes, objectives, and outcomes.
10. **Assessment and Review Cycle**

At the conclusion of each semester, direct assessment data will be collected by instructors in identified courses and forwarded to the Assessment Coordinator. At the end of the academic year, the Assessment Coordinator will summarize data for each graduate student learning outcome (GSLO) and present the summaries to the Graduate Program Coordinator, Graduate Instruction Committee, and the Department Head. The summaries shall include the following:

**10.1** The GLSO

**10.2** A brief summary of the exam or project content.

**10.3** Assessment of student performance

- Acceptable performance criteria will be set at 80% of students receiving a grade of 80% or higher.
- Data will comprise either an assessment or combination of assessments of student performance on assignments, projects, exams, and/or presentations on either a question-by-question basis and/or on a topic-by-topic basis, as appropriate, from identified courses.

**10.4** Recommendations for changes to the course content, if any, based on any deficiencies observed.

**10.5** Following review and concurrence by the Graduate Instruction Committee and the Department Head, the exam or project summaries are included as part of the annual assessment report for the department.

11. **Feedback and Use of the Academic Quality Plan and Assessment Implementation**

The Department Head (or designee) will summarize these results in an annual Academic Quality Assessment Implementation Report each year in accordance with TAMU’s Assessment Process and ACCE’s Assessment Process. The content of this Academic Quality Assessment Implementation Report consists of the following:

**11.1** The current version of the Department Strategic Plan.

**11.2** The current version of the COSC Academic Quality Plan.

**11.3** The annual COSC Academic Quality Assessment Implementation Report.

The main responsibilities for interpretation of results and recommendations for changes lie with the Department Head and his/her designees (the Assessment Program Coordinator, Graduate Coordinator, and the Graduate Instructional Committee).

Regular meetings of the Graduate Instructional Committee are held each semester to review assessment data review program educational objectives and graduate student learning outcomes.
Recommendations for improvement based on the findings of the Assessment Report shall be prepared by the Graduate Instructional Committee and submitted to the graduate faculty for consideration.

Once approved by the faculty, recommendations shall be implemented the following semester.