Student Learning Outcomes Assessment Summary

1. **Assessment information collected**

   a) The goal of having each student keep a comprehensive portfolio of their work and submit it for review prior to graduation failed. Student work that was reviewed was done on an ongoing basis by industry members of the DRT Advisory Committee, many of whom are also Adjunct Faculty for the program.

   b) No exam was administered to students completing Advanced CAD DRT F270 due to changes made to the exam and how it is delivered by the authoring company.

   c) Employers were interviewed on an ad-hoc basis and via the DRT Advisory Committee to evaluate satisfaction with graduates.

2. **Conclusions drawn from the information summarized above**

   a) Students are entering more advanced drafting courses, and therefore leaving earlier drafting courses, with an unacceptably wide range of competency in computer-aided drafting.

   b) Students are entering more advanced drafting courses with an unacceptably wide range of knowledge of construction technology. Some are not sufficiently prepared.

   c) Assessment of a student’s accumulated knowledge and skills are difficult without a method of continuous evaluation and/or gathering of a student’s work.

   d) Assessment of a student’s progress is difficult to assess without a method of continuous evaluation and/or gathering of a student’s work.

   e) Students lack familiarization with accepted standards of practice in AutoCAD, including customization and application of standards.
3. Curricular changes resulting from conclusions drawn above

a) Use of a uniform set of outcomes will be required for all DRT F170 Beginning CAD and DRT F210 Intermediate CAD courses.

b) Outcomes for DRT F170 Beginning CAD and DRT F210 Intermediate CAD will be measured through the delivery of an industry recognized exam. Difficulties obtaining rights to deliver this exam in the past are nearing resolution.

c) In order to continually assess student’s progress and create a comprehensive representation (portfolio) of their work, CAD courses other than DRT F170 Beginning CAD will begin using a single project during the student’s time in the program. The project will consist of one commercial building. Drawings from DRT F210 Intermediate CAD will be built upon in subsequent incremental design/construction courses. At the conclusion of their time in the program, students will have completed a set of construction drawings for said building at approximately 65% completion (comparable to a Design Development submittal in industry). Faculty will retain these completed projects for assessment.

d) Drafting standards based on the National CAD Standard will be incorporated into the course DRT F210 Intermediate CAD.

e) Basic customization of AutoCAD will be incorporated into DRT F210 Intermediate CAD. Advanced customization of AutoCAD will be incorporated into DRT F270 Advanced CAD.

f) Advising for Drafting Technology courses will place more emphasis on course sequence in order that students enter fully prepared for a course with an adequate level of construction technology knowledge for that discipline.

4. Identify the faculty members involved in reaching the conclusions drawn above and agreeing upon the curricular changes resulting

The Drafting Technology program relies upon our many excellent and experienced Adjunct Faculty members to teach our courses. The changes above have been discussed and reviewed with our faculty as time and circumstance allowed, including the following individuals:

Karl Bergman, Adjunct Faculty
Jason Colquhoun, Adjunct Faculty
Elizabeth Johnson, Adjunct Faculty
Galen Johnson, Associate Professor, Construction Management and Drafting Technology Department Chair
Thane Magelky, Assistant Professor, Drafting Technology Program Head
Brian Marmor, Adjunct Faculty
Adam McDermott, Adjunct Faculty
Chris Miller, Adjunct Faculty
Janet Smith, Adjunct Faculty

Faculty that have approved these curricular changes include the following:

Galen Johnson, Associate Professor, Construction Management and Drafting Technology Department Chair
Thane Magelky, Assistant Professor, Drafting Technology Program Head