



Drafting & Design Technology Program Assessment Plan

<http://www.caspercollege.edu/assessment/index.html>

Instructions: To submit an assessment plan for a specified program, please respond to each of the questions below. *Use as much space as you need to describe the program assessment plan.* Once this form is completed, please email it as an attachment to kthatcher@caspercollege.edu. For guidelines and/or assistance in developing a plan for assessing student learning, please contact Kathleen Thatcher or consult resources on the Assessment website at <http://www.caspercollege.edu/assessment/index.html>.

1. **Degree Program(s) reported here:** AAS Drafting and Design Technology, Certificate Mechanical Graphics and Design Technology, Certificate Architectural Graphics and Design Technology
2. **Department:** Drafting and Design Technology
3. **School:** Business and Industry
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6. **Phone:** 268-2409
7. **Date Submitted:** 02/2011

1. Does this program offer distance learning? Yes No

(*Note: Please complete a separate Assessment Plan form for each program.)

A. Conceptual Assessment Plan Components

Assessment enables an understanding of what students are learning as a result of the program. Assessment findings can be used for a variety of purposes including making decisions regarding curriculum and instruction as well as providing feedback to students.

1. *List your program's mission and goals.*

Department Mission Statement:

The Drafting and Design Department Mission is to provide a doorway to a career in Engineering Technology as well as drafting skills for majors in allied fields through quality hands-on learning experiences.

Departmental Goals:

- **To provide an Applied Science degree and certificates in Drafting and Design to meet student and employer requirements for students entering the workforce in the fields of manufacturing, architecture, and civil design.**
- **This educational experience enables students to develop the expertise needed to function in a professional environment.**
- **This educational experience enables students to continue their education and to keep current with future changes in technology in engineering technology.**
- **To offer students the opportunity to gain knowledge in fields associated with engineering technology.**
- **To monitor student success after graduation and to take advice from members of our advisory board to ensure that we are providing appropriate education.**

2. *List the student learning outcomes for the program addressed by this plan. (Note: Please complete a separate Assessment Plan form for each program.)*
 - a. **Demonstrate a minimum of a fundamental knowledge of the concepts of graphic communications for manufacturing and construction.**
 - b. **Demonstrate a working knowledge of the concepts of graphic communications and specifications for manufacturing.**
 - c. **Demonstrate a working knowledge of the concepts of graphic communications and specifications for construction.**
 - d. **Demonstrate a working knowledge of the concepts of graphic communications and specifications for civil design.**
 - e. **Demonstrate a minimum of a fundamental knowledge of the means and methods applied in the manufacturing and construction industries.**
 - f. **Demonstrate competence in using computer technology to manage data.**
 - g. **Demonstrate competence in using CADD software.**

3. *Explain the student learning outcomes relation to the unit mission and goals (i.e. Do the student learning outcomes reflect the unit goals and objectives, further the mission, are rooted in the academic discipline, etc.?)*

These learning outcomes are needed to meet the mission of providing a doorway to a career in Engineering Technology as well as drafting skills for majors in allied fields.

4. *Describe how and by whom assessment findings will be used.*

Assessment findings will be used by instructors, Department Head, Outcomes and Assessments Coordinator, and Dean of the School of Business and Industry to determine areas of strength in the program as well as to provide opportunities for improvement in the overall program.

B. Implementation Assessment Plan Components

It is important to create a detailed implementation plan that aligns each student learning outcome with each of the following items:

- (A) how/where program outcomes are learned,
- (B) what evidence/indicator(s) will be collected, including both direct and indirect evidence,

- (C) how the evidence/indicator(s) will be collected and by whom,
- (D) how the evidence/indicator(s) will be analyzed and by whom, and
- (E) how assessment findings will be communicated back to the academic unit's faculty and students and used to improve the program.

Please note, it is important that the implementation plan collects useful information and that the collection and analysis methods are manageable given the resources available in your academic unit.

1. Instructions: For each program-level outcome (not course objectives), please provide information for each category listed below. Both direct and indirect evidence/indicators should be utilized in your assessment plan. You are encouraged to utilize existing evidence/indicators when feasible to keep the process manageable. You should also collect evidence/indicators throughout the program and not just at the end.

Program Learning Outcome	A Where is outcome learned?	B Evidence/ Indicator(s) of Learning	C Collection method(s) for each source of evidence	D Analysis method(s) for each source of evidence	E Feedback Procedures (Faculty, staff & students)
a. Demonstrate a minimum of a fundamental knowledge of the concepts of graphic communications for manufacturing and construction.	ENTK 1510 Drafting I	Successful completion of drawings from workbook and 75% or better on tests.	Evaluations of student portfolios and tests.	Faculty developed rubric for portfolios and student scores.	Discuss at Drafting Department faculty meeting, develop action plan, and follow-up.
b. Demonstrate a working knowledge of the concepts of graphic communications and specifications for manufacturing.	ENTK 2510 CAD 3D ENTK 1650 Mech I ENTK 2625 Mech II	Successful completion of project.	Evaluations of student portfolios.	Faculty developed rubric for portfolios.	Discuss at Drafting Department faculty meeting, develop action plan, and follow-up.
c. Demonstrate a working knowledge of the concepts of graphic communications and specifications for construction.	ENTK 1710 Arch I ENTK 1720 Arch II ENTK 1750 Com Arch	Successful completion of project.	Evaluations of student portfolios.	Faculty developed rubric for portfolios.	Discuss at Drafting Department faculty meeting, develop action plan, and follow-up.
d. Demonstrate a working knowledge of the concepts of graphic communications and specifications for civil design.	ENTK 2550 Civil	Successful completion of project.	Evaluations of student portfolios.	Faculty developed rubric for portfolios.	Discuss at Drafting Department faculty meeting, develop action plan, and follow-up.
e. Demonstrate a minimum of a fundamental knowledge of the means and methods applied in the manufacturing and construction industries.	ENTK 1750 Com Arch ENTK 2550 Civil ENTK 2625 Mech I	75% or better on tests.	Evaluations of student tests.	Faculty developed rubric for student scores.	Discuss at Drafting Department faculty meeting, develop action plan, and follow-up.

2. Describe the responsibilities, timeline, and the process for implementing this assessment plan.
 - a. Instructors will gather data yearly in each area/class and share with the Drafting and Design Department Head for analysis.
 - b. This analysis will be presented and discussed at Drafting Department faculty meetings.
 - c. The analysis will be presented and discussed annually with department heads from the areas of Machine Tool, Construction, GIS, and Engineering Science.
 - d. The department meetings will be used to interpret findings and develop action plans as needed.
 - e. These action plans will be implemented the following academic year and results will be evaluated.

C. Global Design & Use

It is critical that program assessment plans be developed and approved by all faculty in the department. In addition, *include student input and external sources* (e.g., national standards, advisory boards, employers, alumni, etc.) in the development of the assessment plan(s).

1. *Describe the process through which your academic unit created this assessment plan.*

Include:

- a. *Timeline regarding when or how often this plan will be reviewed and revised. (This could be aligned with your unit's departmental review schedule.)*
 - b. *How students were included in the process and/or how student input was gathered and incorporated into the assessment plan.*
 - c. *What external sources were consulted in the development of this assessment plan?*
 - d. *Assessment of the manageability of the plan in relation to departmental resources and personnel*
- a. This program is an ongoing plan and will be revised as needed. However, to allow for data to be collected and analyzed, it will be reviewed and revised every three academic years starting 2010-2011.
 - b. At this time students were not involved in the process, but will be incorporated in the future as the various assessment data is collected and the plan is more fully incorporated into the program.
 - c. In creating this program, several assessment plans from the School of Trades and Technology were reviewed. Most notably taking information from the Business assessment plan.
 - d. This plan is manageable as we will start with the first outcome in the first academic year (2010-2011) and will continue to add more outcomes as the department faculty become familiar with the process. All of the outcomes identified are already being assessed. The added steps of gathering, analyzing, developing action plans, and following-up will be the challenge.