

**NTID**  
**Computer Aided Drafting Technology Outcomes Assessment**  
**Plan and Report for AY 2008-2009**

*Program Goal: Students develop CAD job-entry skills in the Manufacturing or Architectural/Engineering/Construction (A/E/C) area. Graduates have a broad knowledge of and skills in computer aided drafting technology, applications, and procedures. Technical jobs may include CAD operator, CAD technician, drafter, detailer, or designer.*

Critical Outcomes for all Students		Assessment of Outcomes		Timeline		Results	
Domain/Task/Capability	Performance Criteria/Benchmarks	Instrument/Opportunity	Assessment of Performance	Develop	Collect	Summarization of Results	Use of Results
1. Technical	Student will 1. select and use commands from 3-D drawing and editing toolbars. 2. draw a 3-D model. 3. extract from a 3-D model the following drawings: elevation, sections, floor plan 4. create/add dimensions and tolerances.	Produce a 3-D model(s) from preliminary sketches and will derive from the model(s) the orthographic views with dimensions at the end of Construction CAD III.	Given a series of sketches of a building on site 80% of students will produce a complete set of CAD drawings and related supporting technical information, scoring "acceptable/meets entry level professional standards" for all performance elements.	Winter 20052	Winter 20082	Quater 20082 (n=7), 86% of the students meet or exceeded the performance criteria/benchmarks	Met expectations and currently reviewing skill sets to determine what needs modifications (or improvements).
2. Technical	Student will 1. find technical information and other source material on the Internet and incorporate into drawings and documentation. 2. generate renderings and animations. 3. demonstrate presentation skills.	Create a 3-D model w/ technical documentation for a small office or commercial building and create presentation graphics.	Given a project and design specifications, 80% of CADT students will produce construction documents and presentation graphics scoring "acceptable/meets entry level professional standards" for all performance elements	Winter 20052	Fall 20081	For quarter 20081 (n=11), 82% of students scored "acceptable" or better for 2 of 3 technical skill categories. The one skill that fell short was to "find technical information and other source material and incorporate into drawings and documentation."	Met expectations and currently reviewing skill sets to determine what needs modifications (or improvements).
3. Job Skills	Student will 1. find technical information and other source material on the Internet and incorporate	Co-op Supervisor Evaluation Form	Score of 3 or higher on the RIT Supervisor On-line Co-op Evaluation System, sections "Interaction in the Work	Winter 20052	Summer 20084	For students in the Engineering Studies Department the mean ratings by co-op supervisors who completed the evaluation online during the	Met expectations and no action needed.

	into drawings and documentation. 2. generate renderings and animations. 3. demonstrate presentation skills.		Environment,” “Quality of Work,” and “Communication and Literacy Skills.”			four quarters 20074-20083 was as follows:  4.36 (N=15) for Interaction 1  4.33 (N=15) for Interaction 2  4.07 (N=15) for Interaction 3  4.33 (N=15) for Interaction 4  3.87 (N=15) for Interaction 5  4.33 (N=15) for Quality of Work 1  4.47 (N=15) for Quality of Work 2  4.33 (N=15) for Communication 1  4.60 (N=15) for Communication 2  3.97 (N=15) for Communication 3	
4. Co-op Work Experience	Students will demonstrate technical competency on the job in CAD	Co-op Supervisor Evaluation Form	Score of 3 or higher on RIT Supervisor On-line Co-op Evaluation System, overall student job performance question.	Winter 20052	Summer 20084	For students in the Engineering Studies Department the mean rating by co-op supervisors who completed the evaluation online was 4.33 (N=15) for Overall Satisfaction during the four quarters 20074-20083.	Met expectations and no action needed.
5. Job Placement	Students will gain entry-level employment in A/E/C CAD field	NCE	90% of graduates will be employed in the field of A/E/C CADT.	Winter 20062	Winter 20082	For AY 2006-2007 n=3; 100% of students in seeking employment were working.	Met expectations and no action needed.
6. Student Satisfaction	Graduating students will	Survey	80% of students will rate all	Winter 20052	Spring 20081	For quarter 20081 (n=11), 91% of	Met expectations

	indicate satisfaction with program and courses.		aspects of the program and courses as satisfactory or above.			students “agreed” or “strongly agreed” that “Overall, I am satisfied with the courses in this program.”  Also, 82% of students “agreed” or “strongly agreed” that “Overall, I believe that this program will help me with my career.”	and no action needed.
7. Alumni Satisfaction	Alumni will indicate satisfaction with the instruction they received at NTID/RIT.	Alumni Survey	80% of Alumni will rate their NTID/RIT experience as Good or Excellent (5-point scale) for the instruction they received.	AY 2007-2008	AY 2007-2008	N/A	N/A

**Comments:**

**(Summary/Reflections on progress made since AY 2006-2007 Middle States Report)**

The CADT program was part of a significant department-wide curriculum revision that was implemented AY 2006. As part of this effort, the CADT program developed an Outcomes Assessment data collection plan, and the program has completed its second year of Outcomes Assessment data collection.

While this assessment process still needs more time to collect a sufficient amount of data, the CADT program has found some areas in the curriculum that need improvement as a result of the assessment.

The one technical area that shows up as problematic for students is the ability to research, interpret and incorporate technical information into their projects. This requires critical thinking which is a skill with which many students seem to struggle. The program rescheduled four of its technical courses so to incorporate this skill earlier in the program. This will allow the students more time to develop this skill.

The CADT program will continue to collect data and to make determinations based on the data.

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