Rochester Institute of Technology AMS » National Technical Institute for the Deaf » Engineering Studies Computer Aided Drafting Technology AAS/AOS Program

2019-2020 Assessment Cycle

### Assessment Plan

#### **Mission Statement**

#### **Mission Statement - Engineering Studies**

### **Primary Vision**

The Department of Engineering Studies will be a leader in providing technical education, academic support, and encouragement to prepare deaf and hard-of-hearing students for careers in engineering, engineering technology and engineering-related fields.

#### Mission Statement

The Department of Engineering Studies' mission is to provide the best academic experience for our students' growth and achievement during their learning experiences at RIT/NTID in preparation for a successful career.

The Department of Engineering Studies will offer intensive real-world practices in technical classes taught by experienced faculty who communicate well with deaf and hard-of-hearing students. They provide opportunities for students to develop skill sets that are in demand by industry. Students gain fundamental skills for entry-level positions within engineering and engineering technology fields as well as advanced learning opportunities offered through the other colleges of RIT.

### **Measures**

#### Computer Aided Drafting Technology AAS/AOS Program Outcome Set

Develop the ability to produce accurate 2-D drawings and Building Information Modeling (BIM) projects

Outcome: Use CAD to produce 2D technical drawings

▼ **Measure:** Engineering Graphics [NCAD-150]

Course level Direct - Student Artifact

Details/Description: Technical Drawing Practical.

Practical grade.

Acceptable Benchmark: 80% of students will score 75% or better on final

practical grade

Implementation Plan

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Collection: annually at end of fall semester. Spreadsheet for data collection.

(timeline):

Key/Responsible

Personnel:

Data collected by Assessment Coordinator

Outcome: Extract and modify orthographic technical drawings from a BIM model

▼ Measure: Construction CAD III [NCAD-230]

Course level Direct - Portfolio

Details/Description: Final Project Review of Construction Documents.

Project grade.

Acceptable Benchmark: 80% of students will score 75% or better on final

project review grade

Implementation Plan

(timeline):

Collection: annually at end of fall semester.

Spreadsheet for data collection.

Key/Responsible

Personnel:

Data collected by Assessment Coordinator

Outcome: Create and use a BIM project to produce detailed sections and other details

▼ **Measure:** Advanced Construction CAD [NCAD-240]

Course level Direct - Student Artifact

Details/Description: Course embedded final project.

Project grade.

Acceptable Benchmark: 80% of students will score 75% or better on final

project grade

Implementation Plan

 $\label{lem:collection:annually at end of fall semester.}$ 

(timeline):

Spreadsheet for data collection.

Key/Responsible

Data collected by Assessment Coordinator

Personnel:

Develop supporting skills typical of a technician in the field of architecture, civil engineering, and construction

**Outcome: Identify characteristics of common construction materials** 

▼ **Measure:** Construction Materials and Methods II [NCAD-265]

Program level Direct - Exam

Details/Description: Final Exam.

Exam grade.

Acceptable Benchmark: 80% of students will score 75% or better on course

final exam

Implementation Plan

Collection: annually at end of spring semester.

(timeline):

Spreadsheet for data collection.

Key/Responsible

Data collected by Assessment Coordinator

Personnel:

## Outcome: Gather information from technical drawings and from the field

▼ Measure: Data Collection and Analysis [NCAD-108]

Course level Direct - Exam

Details/Description: Final Exam.

Exam Grade.

Acceptable Benchmark: 80% of students will score 75% or better on final

exam

Implementation Plan

(timeline):

Collection: annually at end of spring semester.

Spreadsheet for data collection.

Key/Responsible

Personnel:

Data collected by Assessment Coordinator

## Outcome: Identify issues related to sustainability in the construction industry

▼ **Measure:** Energy Modeling for Sustainable Construction [NCAD-245]

Course level Direct - Exam

Details/Description: Sustainability Exam.

Exam grade.

Acceptable Benchmark: 80% of students will score 75% or better on

sustainability exam

Implementation Plan

(timeline):

Collection: annually at end of spring semester.

Spreadsheet for data collection.

Key/Responsible

Personnel:

Data collected by Assessment Coordinator

## Develop the skills to create and deliver presentations

# Outcome: Develop a portfolio of student projects in both hard copy and electronic form

▼ **Measure:** Job Search Process for CADT [NCAD-201]

Course level Direct - Portfolio

Details/Description: Student Portfolio.

Portfolio review grade.

80% of students will score 75% or better on Acceptable Benchmark:

portfolio review

Implementation Plan

(timeline):

Collection: annually at end of spring semester.

Spreadsheet for data collection.

Key/Responsible

Personnel:

Data collected by Assessment Coordinator

### Outcome: Generate quality renderings and animations from CAD and BIM projects

▼ Measure: Presentation Graphics [NCAD-250]

Course level Direct - Student Artifact

Details/Description: Final project presentation.

Final project presentation grade.

80% of students will score 75% or better on final Acceptable Benchmark:

project grade

Implementation Plan

Collection: annually at end of fall semester.

(timeline):

Spreadsheet for data collection.

Key/Responsible

Data collected by Assessment Coordinator

Personnel:

Develop positive skills required to be effective on the job

Outcome: Apply technical knowledge and skills on a co-op work experience

▼ **Measure:** Co-op Work Experience [NCAD-299] - RIT Supervisor Online Co-op

Evaluation System

Course level Direct - Other

Details/Description: Performance on the job

Acceptable Benchmark: 80% of students will meet or exceed overall

satisfactory score on co-op job

Implementation Plan Collection: annually at end of summer.

(timeline): RIT Supervisor Online Co-op Evaluation System.

Key/Responsible Data collected by NTID Center on Employment

Personnel: (NCE)

Outcome: Indicate satisfaction with program and courses

▼ **Measure:** Student Satisfaction Survey

Program level Indirect - Survey

Details/Description: Upon completion of final semester.

Survey results.

Acceptable Benchmark: 80% of students will rate all aspects of the program

and courses as satisfactory or above

Implementation Plan Collection: annually near the end of fall semester.

(timeline): Survey results summary.

Key/Responsible Data collected by Assessment Coordinator
Personnel:

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