

Key Findings

Finding per Measure

▼ Computer Aided Drafting Technology AAS/AOS Program Outcome Set

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

Student Learning Outcome: Use CAD to produce 2D technical drawings

▼ **Measure:** Engineering Graphics [NCAD-150] - Technical Drawing Practical *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 (timeline):	Collection: annually at end of fall semester beginning AY 2013/2014. Spreadsheet for data collection.
Key/Responsible Personnel:	Data collected by Assessment Coordinator

Findings for Engineering Graphics [NCAD-150] - Technical Drawing Practical

Summary of Findings:	88% of students (no=17) scored 75% or better on the final practical assignment
Results:	Acceptable Benchmark Achievement: Met
Recommendations :	None
Reflections/Notes :	

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

▼ **Measure:** Construction CAD II [NCAD-220] - Final Portfolio Review of Construction Documents *Course level; Direct - Portfolio*

Details/Description:	Portfolio grade
Acceptable Benchmark:	80% of students will score 75% or better on final portfolio review grade
Implementation Plan (timeline):	Collection: annually at end of fall semester beginning AY 2014/2015. Spreadsheet for data collection.
Key/Responsible Personnel:	Data collected by Assessment Coordinator

Findings for Construction CAD II [NCAD-220] - Final Portfolio Review of Construction Documents

Summary of Findings:	100% of the students (n=8) scored better than 75% on their final portfolio review.
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Results: Acceptable Benchmark Achievement: Exceeded
 Recommendations : None
 Reflections/Notes :

Student Learning Outcome: Generate reports on information contained in a BIM model

▼ **Measure:** Construction CAD II [NCAD-220] - Course Embedded Assignments
Course level; Direct - Student Artifact

Details/Description: Course embedded assignments. Rubric scale 1-5.
 Acceptable Benchmark: 80% of students will score 3 or more on the rubric scale 1-5.
 Implementation Plan (timeline): Collection: annually at end of fall semester beginning AY 2014/2015. Spreadsheet for data collection.
 Key/Responsible Personnel: Data collected by Assessment Coordinator

Findings for Construction CAD II [NCAD-220] - Course Embedded Assignments

Summary of Findings: 100% of the students (n=8) scored better than 75% on their assignments.
 Results: Acceptable Benchmark Achievement: Exceeded
 Recommendations : None
 Reflections/Notes :

Student Learning Outcome: Create a BIM project based on preliminary information

▼ **Measure:** Advanced Construction CAD [NCAD-240] - Course Embedded Project
Course level; Direct - Student Artifact

Details/Description: Project grade
 Acceptable Benchmark: 80% of students will score 75% or better on final project grade.
 Implementation Plan (timeline): Collection: annually at end of fall semester beginning AY 2015/2016. Spreadsheet for data collection.
 Key/Responsible Personnel: Data collected by Assessment Coordinator

Findings for Advanced Construction CAD [NCAD-240] - Course Embedded Project

Summary of Findings:	82% of the students (no=11) scored 75% or better on the final project.
Results:	Acceptable Benchmark Achievement: Met
Recommendations :	None
Reflections/Notes :	

Student Learning Outcome: Use a BIM project as a basis to produce detailed sections and other details

▼ **Measure:** Advanced Construction CAD [NCAD-240] - Final portfolio review of construction documents
Course level; Direct - Portfolio

Details/Description:	Portfolio grade
Acceptable Benchmark:	80% of students will score 75% or better on final portfolio review grade
Implementation Plan (timeline):	Collection: annually at end of fall semester beginning AY 2015/2016. Spreadsheet for data collection
Key/Responsible Personnel:	Data collected by Assessment Coordinator

Findings for Advanced Construction CAD [NCAD-240] - Final portfolio review of construction documents

Summary of Findings:	73% of the students (no=11) scored a 75% or better on the final portfolio review.
Results:	Acceptable Benchmark Achievement: Not Met
Recommendations :	Improvement is needed on on being able to explain the content of the student portfolio.
Reflections/Notes :	

Develop the skills to acquire, record and analyze information derived from field measurements, existing drawings & other technical documents

Student Learning Outcome: Create and interpret dimensions for technical drawings

▼ **Measure:** Data Collection and Analysis [NCAD-108] - Final Dimensioning Practical
Course level; Direct - Student Artifact

Details/Description:	Practical grade
Acceptable Benchmark:	80% of students will score 75% or better on final dimensioning practical grade
Implementation Plan (timeline):	Collection: annually at end of spring semester beginning AY 2013/2014. Spreadsheet for data collection.

Key/Responsible Personnel: Data collected by Assessment Coordinator

Findings for Data Collection and Analysis [NCAD-108] - Final Dimensioning Practical

Summary of Findings: 50% of the students (no=10) scored 75% or better on their homework.
Results: Acceptable Benchmark Achievement: Not Met
Recommendations : This measure is being modified. More practice needs to be done on construction math, using scales, and reading blueprints.
Reflections/Notes :

Student Learning Outcome: Define appropriate technical vocabulary as used by the construction industry

▼ **Measure:** Data Collection and Analysis [NCAD-108] - Final Vocabulary Exam
Course level; Direct - Exam

Details/Description: Exam grade
Acceptable Benchmark: 80% of students will score 75% or better on final vocabulary exam grade
Implementation Plan (timeline): Collection: annually at end of spring semester beginning AY 2013/2014. Spreadsheet for data collection.
Key/Responsible Personnel: Data collected by Assessment Coordinator

Findings for Data Collection and Analysis [NCAD-108] - Final Vocabulary Exam

Summary of Findings: This measure is being modified. Students need more hands on practice on construction math, using scales, and blueprint reading.
Recommendations : N/A
Reflections/Notes : Instructor did not provide a separate vocabulary exam.

Student Learning Outcome: Field measure and input existing space conditions into CAD

▼ **Measure:** Data Collection and Analysis [NCAD-108] - Course project
Course level; Direct - Student Artifact

Details/Description: Project grade
Acceptable Benchmark: 80% of students will score 75% or better on course project grade.

Implementation Plan (timeline): Collection: annually at end of spring semester beginning AY 2013/2014
Spreadsheet for data collection

Key/Responsible Personnel: Data collected by Assessment Coordinator

Findings for Data Collection and Analysis [NCAD-108] - Course project

Summary of Findings: 80% of the students (n=10) scored 75% or better on the project grade.

Results: Acceptable Benchmark Achievement: Met

Recommendations : None

Reflections/Notes :

Student Learning Outcome: Research technical information and incorporate into drawings and documentation

▼ **Measure:** Advanced Construction CAD [NCAD-240] - Design project
Course level; Direct - Student Artifact

Details/Description:
Acceptable Benchmark: 80% of students will score 3 or above on incorporating technical information into design project.
Rubric scale: 1-5.

Implementation Plan (timeline): Collection: annually at end of fall semester beginning AY 2015/2016
Spreadsheet for data collection

Key/Responsible Personnel: Data collected by Assessment Coordinator

Findings for Advanced Construction CAD [NCAD-240] - Design project

Summary of Findings: 82% of the students (n=11) scored 3 or better on the final design project

Results: Acceptable Benchmark Achievement: Met

Recommendations : None

Reflections/Notes :

Understand the basic characteristics of construction materials and procedures

Student Learning Outcome: Identify various construction materials using correct terminology

▼ **Measure:** Construction Materials and Methods II [NCAD-265] - Terminology Exam
Course level; Direct - Exam

Details/Description:	Exam grade
Acceptable Benchmark:	80% of students will score 75% or better on terminology exam
Implementation Plan (timeline):	Collection: annually at end of spring semester beginning AY 2014/2015 Spreadsheet for data collection
Key/Responsible Personnel:	Data collected by Assessment Coordinator

Findings for Construction Materials and Methods II [NCAD-265] - Terminology Exam

Summary of Findings:	75% of the students (n=8) scored 75% or better on the vocabulary exam.
Results:	Acceptable Benchmark Achievement: Not Met
Recommendations :	Continued instruction on vocabulary.
Reflections/Notes :	Instructor did not provide a separate exam for technical vocabulary. The results were extrapolated from the final exam.

Student Learning Outcome: Identify characteristics of common construction materials

▼ **Measure:** Construction Materials and Methods II [NCAD-265] - Final Exam *Program level; Direct - Exam*

Details/Description:	Exam grade
Acceptable Benchmark:	80% of students will score 75% or better on course final exam
Implementation Plan (timeline):	Collection: annually at end of spring semester beginning AY 2014/2015. Spreadsheet for data collection.
Key/Responsible Personnel:	Data collected by Assessment Coordinator

Findings for Construction Materials and Methods II [NCAD-265] - Final Exam

Summary of Findings:	75% of students (no=8) scored 75% or better on the final exam.
Results:	Acceptable Benchmark Achievement: Not Met
Recommendations :	More emphasis on technical information.
Reflections/Notes :	Students normally do better on this exam. This group included two students who fell short of expectations.

Develop the skills to create and present visualization materials

Student Learning Outcome: Develop and maintain a portfolio of student projects in both hard copy and electronic form

▼ **Measure:** Construction CAD III [NCAD-230] - Student Portfolio
Course level; Direct - Portfolio

Details/Description:
Acceptable Benchmark: Portfolio review grade 80% of students will score 75% or better on portfolio review
Implementation Plan (timeline): Collection: annually at end of spring semester beginning AY 2014/2015.
Spreadsheet for data collection.
Key/Responsible Personnel: Data collected by Assessment Coordinator

Findings for Construction CAD III [NCAD-230] - Student Portfolio

Summary of Findings: 100% of students (no=8) scored 75% or better on their portfolio review.
Results: Acceptable Benchmark Achievement: Exceeded
Recommendations : None
Reflections/Notes :

Student Learning Outcome: Generate renderings and animations from CAD and BIM projects

▼ **Measure:** Presentation Graphics [NCAD-250] - Final Project
Course level; Direct - Student Artifact

Details/Description: Final project grade
Acceptable Benchmark: 80% of students will score 75% or better on final project grade
Implementation Plan (timeline): Collection: annually at end of fall semester beginning AY 2015/2016.
Spreadsheet for data collection.
Key/Responsible Personnel: Data collected by Assessment Coordinator

Findings for Presentation Graphics [NCAD-250] - Final Project

Summary of Findings: 100% of the students (no=11) scored 75% or better on the final project
Results: Acceptable Benchmark Achievement: Exceeded
Recommendations : None
Reflections/Notes :

Student Learning Outcome: Effectively prepare and present projects utilizing presentation graphics

▼ **Measure:** Presentation Graphics [NCAD-250] - Final project presentation
Course level; Direct - Student Artifact

Details/Description: Final project presentation grade
Acceptable Benchmark: 80% of students will score 75% or better on final project presentation grade
Implementation Plan (timeline): Collection: annually at end of fall semester beginning AY 2015/2016.
Spreadsheet for data collection.
Key/Responsible Personnel: Data collected by Assessment Coordinator

Findings for Presentation Graphics [NCAD-250] - Final project presentation

Summary of Findings: 91% of the students (no=11) scored 75% or better on the project presentation.
Results: Acceptable Benchmark Achievement: Exceeded
Recommendations : None
Reflections/Notes :

Student Learning Outcome: Demonstrate creative skills on a design project

▼ **Measure:** Advanced Construction CAD [NCAD-240] - Design Project
Course level; Direct - Student Artifact

Details/Description: Design project grade
Acceptable Benchmark: 80% of students will score 75% or better on design project grade
Implementation Plan (timeline): Collection: annually at end of fall semester beginning AY 2015/2016.
Spreadsheet for data collection.
Key/Responsible Personnel: Data collected by Assessment Coordinator

Findings for Advanced Construction CAD [NCAD-240] - Design Project

Summary of Findings: 82% of the students (no=11) scored 75% or better on the design project
Results: Acceptable Benchmark Achievement: Met
Recommendations : None
Reflections/Notes :

Understand current issues affecting the construction industry

Student Learning Outcome: Explain the purpose and role of building codes in the construction industry

▼ **Measure:** Principles of Structural Systems [NCAD-275] and Presentation Graphics [NCAD-250] - Building Codes Exam
Course level; Direct - Exam

Details/Description:	Exam grade
Acceptable Benchmark:	80% of students will score 75% or better on building codes exam
Implementation Plan (timeline):	Collection: annually at end of fall semester beginning AY 2014/2015. Spreadsheet for data collection.
Key/Responsible Personnel:	Data collected by Assessment Coordinator

Findings for Principles of Structural Systems [NCAD-275] and Presentation Graphics [NCAD-250] - Building Codes Exam

Summary of Findings:	71% of the students (n=7) scored 75% or better on the exam covering building codes.
Results:	Acceptable Benchmark Achievement: Not Met
Recommendations :	Continue to need more practice reading technical literature
Reflections/Notes :	Students continue to struggle with the language in the building codes. They need more assistance with understanding the language and doing the calculations.

Student Learning Outcome: Identify issues related to sustainability in the construction industry

▼ **Measure:** MEP Systems [NCAD-285] - Sustainability Exam
Course level; Direct - Exam

Details/Description:	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 beginning AY 2014/2015. Spreadsheet for data collection.
Key/Responsible Personnel:	Data collected by Assessment Coordinator

Findings for MEP Systems [NCAD-285] - Sustainability Exam

Summary of Findings:	100% of students (n=8) scored 75% or better on sustainability exam
Results:	Acceptable Benchmark Achievement: Exceeded
Recommendations :	none
Reflections/Notes :	

Develop positive skills required to be effective on the job

Student Learning Outcome: Engage productively in a collaborative team project

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

Course level; Indirect - Other

Details/Description: Self evaluation, peer review and teacher evaluation using rubric scale: 1-5
Acceptable Benchmark: 80% of students will score 3 or more on the rubric scale 1-5
Implementation Plan (timeline): Collection: annually at end of fall semester beginning AY 2015/2016. Spreadsheet for data collection.
Key/Responsible Personnel: Data collected by Assessment Coordinator

Findings for Advanced Construction CAD [NCAD-240] - Team project

Summary of Findings: 64% of students (n=11) scored 3 or better on their team project.
Results: Acceptable Benchmark Achievement: Not Met
Recommendations : Students need more practice on meeting their responsibilities within a team effort.
Reflections/Notes :

Student Learning Outcome: Accurately and clearly present technical information to an audience of peers

▼ **Measure:** Presentation Graphics [NCAD-250] - Final Project Presentation

Course level; Direct - Other

Details/Description: Self evaluation, peer review and teacher evaluation using rubric scale: 1-5
Acceptable Benchmark: 80% of students will score 3 or more on the rubric scale 1-5
Implementation Plan (timeline): Collection: annually at end of fall semester beginning AY 2015/2016. Spreadsheet for data collection.
Key/Responsible Personnel: Data collected by Assessment Coordinator

Findings for Presentation Graphics [NCAD-250] - Final Project Presentation

Summary of Findings: 91% of the students (no=11) scored 75% or better on the project presentation.
Results: Acceptable Benchmark Achievement: Met
Recommendations : None
Reflections/Notes :

Student Learning 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 (timeline): Collection: annually at end of summer beginning AY 2014/2015.
RIT Supervisor Online Co-op Evaluation System.
Key/Responsible Personnel: Data collected by NTID Center on Employment (NCE)

Findings for Co-op Work Experience [NCAD-299] - RIT Supervisor Online Co-op Evaluation System

Summary of Findings: N = 3. 100% of students received satisfactory score on co-op job.
Results: Acceptable Benchmark Achievement: Exceeded
Recommendations :
Reflections/Notes :

Student Learning Outcome: Gain entry level employment in the construction industry

▼ **Measure:** NCE - Job Placement
Program level; Indirect - Other

Details/Description: Job placement after graduation
Acceptable Benchmark: 90% of graduates who are seeking employment in the construction industry will be employed
Implementation Plan (timeline): Collection: annually during spring beginning AY 2016/2017.
Survey of graduates.
Key/Responsible Personnel: Data collected by NTID Center on Employment (NCE)

Findings for NCE - Job Placement

Summary of Findings: N = 4. 100% of graduates gained entry level employment in the construction industry.
Results: Acceptable Benchmark Achievement: Exceeded
Recommendations :
Reflections/Notes :

Student Learning Outcome: Indicate satisfaction with program and courses

▼ **Measure:** Student Satisfaction Survey - Upon Completion of Final Semester
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 (timeline): Collection: annually near the end of fall semester beginning AY 2015/2016
Survey results summary
Key/Responsible Personnel: Data collected by Assessment Coordinator

Findings for Student Satisfaction Survey - Upon Completion of Final Semester

Summary of Findings: 82% of students (no=11) rated the program and courses as satisfactory or above
Results: Acceptable Benchmark Achievement: Met
Recommendations : None
Reflections/Notes :

Overall Recommendations

No text specified

Overall Reflection

No text specified