

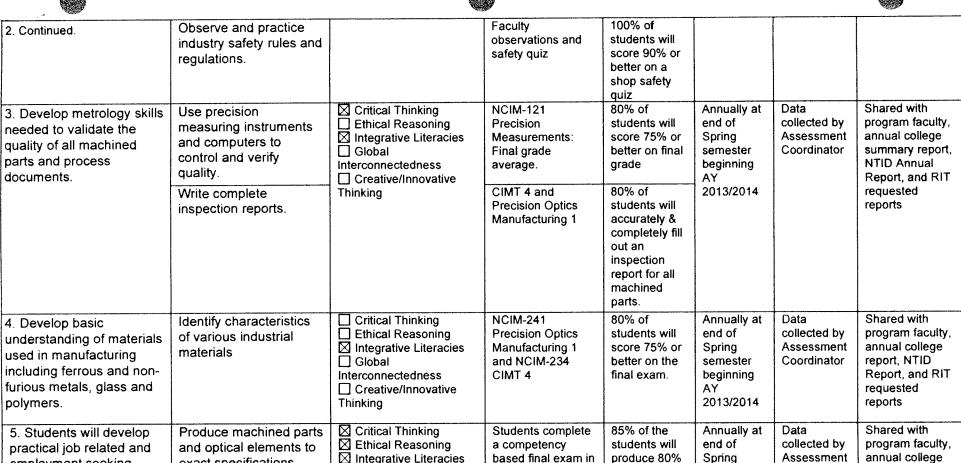
## **Program Level Outcomes Assessment Plan**

Program Name/College: Computer Integrated Machining Technology/NTID AOS

College Contact for Program Assessment: Dino Laury

| Program Goals                                                                                                        | Student Learning<br>Outcomes                                                                                             | Academic Program<br>Profile                                                                                                                                                                                                      | Data<br>Source/Measure<br>Curriculum<br>Mapping                                              | Benchmark                                                                                              | Timeline                                                           | Data<br>Analysis<br>Key<br>Findings               | Use of Results Action Items and Dissemination                                                             |
|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Please List program-level goals                                                                                      | Students will be able to:<br>(task, capability,<br>knowledge, skills, and<br>dispositions) Use<br>measurable verbs.      | Alignment to the five RIT essential outcomes - check all that apply  Double click on the check box and find the Default  Value and click Checked to check the box. To uncheck, the box, double click and then click Not Checked. | Assessment opportunity (course/experience ) method/measures, assignment/rubric)              | Standard,<br>target, or<br>achievement<br>level (usually<br>a %)<br>Statement of<br>student<br>Success | Identify when and how data are collected, aggregated, and analyzed | Identify who is responsible and list key findings | Identify how results are used and shared. List any recommendation s or action items                       |
| Develop technical skills and knowledge needed to transform ideas and drawings into precision machined parts.         | Interpret blueprints and specifications to manufacture and inspect products                                              | ☐ Critical Thinking☐ Ethical Reasoning☐ Integrative Literacies☐ Global☐ Interconnectedness☐ Creative/Innovative                                                                                                                  | NCIM-102 Blueprint<br>Reading 2: Final<br>Exam                                               | 80% of<br>students will<br>score 75% or<br>better on final<br>exam.                                    | Annually at end of Spring semester beginning 2013/2014             | Data<br>collected by<br>Assessment<br>Coordinator | Shared with program faculty, annual college summary report, NTID Annual Report, and RIT requested reports |
|                                                                                                                      | Apply mathematical concepts & engineering graphics skills to solve machining problems                                    |                                                                                                                                                                                                                                  | NMTH-206 Trig for<br>Coordinate<br>analysis: Final<br>Exam                                   | 80% of<br>students will<br>score 75% or<br>better on final<br>exam.                                    |                                                                    |                                                   |                                                                                                           |
|                                                                                                                      | Use Computer Assisted Programming, Computer Assisted Machining (CAD/CAM) software.                                       | Thinking                                                                                                                                                                                                                         | NCIM-252 CNC 2:<br>final project<br>evaluation based<br>on scoring guide                     | 80% of<br>students will<br>score 75% or<br>better on<br>scoring guide                                  |                                                                    |                                                   |                                                                                                           |
| Develop skills and knowledge to safely operate conventional and (CNC) machines, tools and other automatic equipment. | Set up and operate conventional lathes, mills, grinders and polishers.                                                   | □ Critical Thinking     □ Ethical Reasoning     □ Integrative Literacies     □ Global     □ Interconnectedness     □ Creative/Innovative     □ Thinking                                                                          | NCIM-234 CIMT<br>4 and NCIM-241<br>Prec. Opts. Manuf.:<br>competency based<br>project score. | 80% of<br>students will<br>score 75% or<br>better on<br>competency<br>based project                    | Annually at end of Spring semester beginning AY 2013/2014          | Data collected by Assessment Coordinator          | Shared with program faculty, annual college summary report, NTID Annual Report & RIT requested reports.   |
|                                                                                                                      | Create, edit, and verify toolpaths; copy and paste parameters, toolpaths and tool associative geometry for CNC programs. |                                                                                                                                                                                                                                  | CNC 1 and CNC 2:<br>competency based<br>project.                                             | 80% of<br>students will<br>score 75% or<br>better on<br>project<br>scoring rubric                      |                                                                    |                                                   |                                                                                                           |





employment seeking

metalworking or precision

skills for careers in

optics, and express

program of learning.

satisfaction with their

manufacturing.

exact specifications.

Observe and practice

regulations.

industry safety rules and

☑ Global

Thinking

Interconnectedness

☐ Creative/Innovative

|    |                                                                                                                | machined parts.                                                              |                                                                             |                                                   |                                                                                                   |
|----|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------|---------------------------------------------------------------------------------------------------|
| es | NCIM-241<br>Precision Optics<br>Manufacturing 1<br>and NCIM-234<br>CIMT 4                                      | 80% of<br>students will<br>score 75% or<br>better on the<br>final exam.      | Annually at<br>end of<br>Spring<br>semester<br>beginning<br>AY<br>2013/2014 | Data<br>collected by<br>Assessment<br>Coordinator | Shared with program faculty, annual college report, NTID Report, and RIT requested reports        |
| es | Students complete<br>a competency<br>based final exam in<br>CIMT 4 and<br>Precision Optics<br>Manufacturing I. | 85% of the students will produce 80% of specified features within tolerance. | Annually at end of Spring semester beginning AY 2014/2015                   | Data<br>collected by<br>Assessment<br>Coordinator | Shared with program faculty, annual college summary report, NTID Annual Report, and RIT requested |
|    | Faculty observation checklist  Co-op Supervisor Evaluation Form                                                | 100% of the<br>students will<br>follow safety<br>standards                   |                                                                             |                                                   | reports                                                                                           |
|    | J                                                                                                              |                                                                              |                                                                             |                                                   |                                                                                                   |







| 5. Continued | Demonstrate problem- solving, decision- making, responsibility, pride in self and work performance, and other learned behaviors and attitudes necessary for entering the work force | NCE Alumni data  80% of students will score 3 or more on a 1-5 assessment evaluation Form  Data collected every third year.                                                   |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              | Demonstrate technical competency on the job for an approved co-op employer, which will allow them access to participation within our global society.                                | Co-op Supervisor  90% of graduates will be employed in the field of precision manufacturing and/ or precision optics  Annually at the beginning of Fall semester AY 2015/2016 |
|              | Affirm satisfaction in their career/academic preparation.                                                                                                                           | Student Satisfaction Survey  80% of students will respond they are "very satisfied" or "satisfied" with overall program and courses satisfaction.                             |

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