



ENGINEERING SCIENCE

Canino School of Engineering Technology

2019 Assessment Report

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Mission

The Canino School of Engineering Technology (CSOET) at SUNY Canton is committed to providing an educational experience that prepares students for a career in a technologically oriented society. The curricula are focused on providing career skills reviewed by industry partners and accreditation agencies. Our programs provide opportunities for every student to find a suitable starting point for their academic endeavor. Graduates have the ability to work in teams, think critically, utilize the tools of their trade or industry, and communicate effectively.



Program mission:

Provide students with preparation in engineering fundamentals to enable them to enroll in baccalaureate degree in engineering or engineering technology with junior status, and successfully complete their baccalaureate degree.

Program outcomes (PO):

- 1- 60% of admitted students will graduate w/AS degree
- 2- 85% of graduates will enroll in BS/BT Eng. Programs
- 3- 90% of transfer graduates will affirm that their preparation in Eng. Sci. has been adequate.



What was assessed? Student learning outcomes list:

- *PSLO #1 (ISLO #3)* Have solid foundation in math & science (ABET 1)
- *PSLO #2 (ISLO #5)* Have understanding & knowledge of common engineering courses (ABET 2, 5, 6)
- *PSLO #3 (ISLO #1)* Develop communication skill (ABET 3)
- *PSLO #4 (ISLO #2)* Critical Thinking (ABET 7)



Where were outcomes assessed?

PSLO #1 (ISLO #3) Have solid foundation in math & science (GER 1 &2)

CHEM 150

CHEM 155

MATH 161

PHYS 131 PHYS 135

MATH 162

MATH 263

MATH 364

PHYS 132 PHYS 136

PSLO #2 (ISLO 5)- Professional Competence

ENGS 201

ENGS 202

ENGS 205

ENGS 263/264

PSLO #3 (ISLO 1)- Develop Communication Skills

ENGL 101

ENGS 101

ENGS 102

PSLO #4 (ISLO 2)- Critical Thinking

ECON 103 (GER 3)

ENGS 263



How was the assessment accomplished?

- Student work assessed:
 - Quizzes
 - Midterm and final exams
 - Oral presentations
 - Group projects
 - Term papers
- Measurement strategy:
 - Applicable rubrics used for oral presentations, term papers and group projects
 - % of questions answered correctly on quizzes and midterm/final exams
- Sample size:
 - All students who take the designated assessed courses, see attachment for N for each course



Program assessment results:

- **2014:** n=9/10; 8 BS 1BT
PO1=90% met PO2 =100% met PO3 = met
- **2015:** n=8/10; 6 BS 2 BT
PO1=80% met PO2 =100% met PO3 = met
- **2016:** n=8/9; 5 BS 2 BT 1?
PO1=89% met PO2 =88% met PO3 = met
- **2017:** n=3/5; 2 BS, 1 Transfer SUNY P. math.
PO1=60% met PO2 =100% met PO3 = met
- **2018:** n=7/11; 5 BS 2 BT 1 will grad. 5/2019
PO1=64% met PO2 =100% met PO3= met

- **2019:** n=7/10; 6 BS 1 BT
PO1=70% met PO2 =100% met PO3= met



Data-driven decisions: How the program has or plans to “close the loop” based on these results.

- The program became more aligned with PSLOs since the changes made in 2017 (effective F2018).
- Continue to revise the related courses to better align with the PSLOs.

ENROLLMENT (as previous years)?

PHYSICS courses (Must cover more materials)

Advanced Math courses (Bring the standards Hi)



What resources were used or have been requested to close the loop?

Program needs more students. Many empty sits.

Resources:

Additional 2+2 agreements with

RPI, Cornell University, Georgia Tech

Exposure & Publicity

Merit Scholarships



Attachments: 2018 ISLO4 Findings

