

## **Continuous Program Improvement (CPI)**

## Student Learning Outcomes (SLO)/Program Learning Outcomes (PLO)

Three Year Plan - 2024-2027

Program name	Master of Energy Management		
Expected date of submission	June 30, 2024		
Department chair/program director	artment chair/program director Remi Charron		
Dean's signature	GAL		

The Middle States Commission on Higher Education (MSCHE) Standard V, *Educational Effectiveness Assessment*, states: "Assessment of student learning and achievement demonstrates that the institution's students have accomplished educational goals consistent with their program of study, degree level, the institution's mission, and appropriate expectations for institutions of higher education."

To ensure that New York Tech's CPI process meets this standard, each department is requested to create a three-year assessment/evaluation plan to improve student learning for **each of their degree programs**. The plan should cover the following academic years: **2024-2025**, **2025-2026**, **and 2026-2027**.

## Each Program Learning Outcomes (PLO) CPI plan should include the following:

1. State/update each degree program's **learning outcomes** based on the <u>Program Assessment Guidelines and</u> <u>Best Practices.</u> The original Program Learning Outcome Assessment Plans and Reports are available here: <u>http://www.nyit.edu/planning/academic\_assessment\_plans\_reports</u>. Upon graduation, students are expected to:

Understand and describe, Assess, and Recommend solutions of the following six inter-related areas associated with energy management:

- PLO1: Environmental issues at multiple scales and situate these in the context of energy management and human manipulation of ecosystems.
- PLO2: Impact of climate change and its associated mitigation and adaptation policies will have on different energy systems.
- PLO3: Core concepts of project management, business management, assets management, risk assessment/management and operation management
- PLO4: Socio-economic impact of implementing different solutions, and of doing nothing
- PLO5: Energy projects, technologies, and services; including technical risk and their energy savings and life cycle impacts
- PLO6: Social and political considerations of policies and solutions taking into consideration equity, diversity and inclusion as well as Indigenous perspectives in Canada
- Provide/update the matrix of program learning outcomes that indicates which learning outcomes are assessed in which courses. The original matrices are available here: <a href="http://www.nyit.edu/planning/academic\_assessment\_plans\_reports">http://www.nyit.edu/planning/academic\_assessment\_plans\_reports</a>.

	1	2	3	4	5	6
ENGY 610		•	•	•	•	
ENGY 670		•		•	•	٠
ENGY 695	•	•	•		٠	٠
ENGY 710	•	•	•		•	
ENGY 775	•			•	•	

ENVT 601	•	•	•	•		•
ENGY 890	•		•	•	•	•
ENGY 615			•	•	•	
ENGY 725	•	•	•		•	
ENVT 660	•			٠	•	
ENGY 690	•	•	•	•	●	•
ENGY 715				•	•	
ENGY 730	•	•	•		•	•
ENGY 740				•	•	
ENGY 785	•	•	•	•	•	•
ENVT 725	•	•	•	•	•	•

3. Describe the **method of assessment and measurement instruments** (e.g., rubric, exam items, scoring guide for a particular task, supervisor evaluation form, and standardized assessment tool). Note: Direct evidence of student learning is required; both direct and indirect evidence are strongly recommended. [Direct evidence of student learning includes but is not limited to: course assignments, portfolios, internship evaluations, capstone course work, thesis papers, research projects, standardized tests, etc. Indirect evidence of student learning includes but is not limited to: student surveys, interviews, alumni surveys, employer surveys, focus groups, students' reflections, etc.]

Direct assessment of the students as well as a review of course evaluations for elements pertinent to the PLOs.

Last updated October 2023

4. A **timeline** of when each PLO will be assessed; for example:

Program Learning Outcome	AY 23-24	AY 24-25	AY 25-26
1		Х	
2		Х	
3			Х
4	Х		
5			Х
6	Х		

5. Faculty working as a team is essential in program learning outcome assessment. Please provide a **brief** description of how faculty are involved in the creation of this assessment plan and how the results will be communicated to all stakeholders.

In the Fall & Summer 2023, the EM faculty in Vancouver undertook a self study. As part of this, they reviewed all Program Learning Outcomes, and created a new set of PLOs. As part of this exercise, they reviewed courses learning outcomes and matched these with the PLOs and the results are depicted in the Table in Section 2 above. The faculty will meet as a group and review PLOs 4 and 6 in the first review period of this cycle.