STATE UNIVERSITY OF NEW YORK
COLLEGE OF TECHNOLOGY
CANTON, NEW YORK

MASTER SYLLABUS

COURSE NUMBER – COURSE NAME
MECH 480 – Co-Op Experience in Mechanical Engineering Technology

Created by: Daniel Miller

Updated by:

Canino School of Engineering Technology

Department: Mechanical & Energy Technologies

Semester/Year: Fall 2018

A. **TITLE**: Co-Op Experience in MET

B. **COURSE NUMBER:** MECH 480

C. **CREDIT HOURS: (Hours of Lecture, Laboratory, Recitation, Tutorial, Activity)**

 # Credit Hours: 6 !
 # Lecture Hours: **per week**
 # Lab Hours: **per week**
Other: 40 hours per credit hour (1-6 credits) **per week**

Course Length: 15 **Weeks**

D. **WRITING INTENSIVE COURSE**: Yes ☐ No ☒

E. **GER CATEGORY: None:** ☒ **Yes:** GER
***If course satisfies more than one*:** GER

F. **SEMESTER(S) OFFERED: Fall** ☐ **Spring** ☐ **Fall & Spring** ☒

G. **COURSE DESCRIPTION:**

The course provides real world learning experience through professional cooperative education placement in a private/public organization related to the student's academic objectives and career goals. This course requires students to be involved in the design, fabrication or testing of a system, a component, a software, or a machine where real world constraints such as manufacturablity, safety, environment, aesthetics, and costs are important. In addition to their work experience, students are required to submit (40 hr.) reaction papers, power point presentation and supervisors evaluation.

H. **PRE-REQUISITES: None** ☐ **Yes** ☒ **If yes, list below:**

45 earned credits, consent of academic advisor and approval by Dean of CSOET

CO-REQUISITES: None ☒ **Yes** ☐ **If yes, list below:**

I. STUDENT LEARNING OUTCOMES: (*see key below*)

By the end of this course, the student will be able to:

Course Student Learning Outcome [SLO]	***Program Student Learning Outcome [PSLO]***	***GER*** *[If Applicable]*	***ISLO & SUBSETS***	
1. Demonstrate ability to plan and meet work responsibilities, and to communicate plans and progress to employer and faculty advisor			5-Ind, Prof, Disc, Know Skills ISLO ISLO	Subsets Subsets Subsets Subsets
2. Apply project management skills on engineering/manfacturing assignments			5-Ind, Prof, Disc, Know Skills ISLO ISLO	Subsets Subsets Subsets Subsets
3. Practice and improve professional communication skills			1-Comm Skills ISLO ISLO	Subsets Subsets Subsets Subsets
4. Practice teamwork and familiarity with economic, societal and ethical issues			4-Soc Respons ISLO ISLO	Subsets Subsets Subsets Subsets
5. Accrue experience and insight that will enhance the student's potential for career growth upon graduation			5-Ind, Prof, Disc, Know Skills ISLO ISLO	Subsets Subsets Subsets Subsets
			ISLO ISLO ISLO	Subsets Subsets Subsets Subsets

			ISLO ISLO ISLO	Subsets Subsets Subsets Subsets
			ISLO ISLO ISLO	Subsets Subsets Subsets Subsets
			ISLO ISLO ISLO	Subsets Subsets Subsets Subsets
			ISLO ISLO ISLO	Subsets Subsets Subsets Subsets

KEY	**Institutional Student Learning Outcomes [ISLO 1 – 5]**
ISLO #	**ISLO & Subsets**
1	**Communication Skills** Oral [O], Written [W]
2	**Critical Thinking** *Critical Analysis [CA] , Inquiry & Analysis [IA] , Problem Solving [PS]*
3	**Foundational Skills** *Information Management [IM], Quantitative Lit,/Reasoning [QTR]*
4	**Social Responsibility** *Ethical Reasoning [ER], Global Learning [GL], Intercultural Knowledge [IK], Teamwork [T]*
5	**Industry, Professional, Discipline Specific Knowledge and Skills**

*Include program objectives if applicable. Please consult with Program Coordinator

J. APPLIED LEARNING COMPONENT: Yes ☒ No ☐

If YES, select one or more of the following categories:

- ☐ Classroom/Lab
- ☒ Internship
- ☐ Clinical Placement
- ☐ Practicum
- ☐ Service Learning
- ☐ Community Service
- ☐ Civic Engagement
- ☐ Creative Works/Senior Project
- ☐ Research
- ☐ Entrepreneurship (program, class, project)

K. TEXTS:

None

L. REFERENCES:

None

M. EQUIPMENT: None ☒ Needed:

N. GRADING METHOD: A-F

O. SUGGESTED MEASUREMENT CRITERIA/METHODS:

40 hour progress reports
Power point presentation
Supervisors evaluation

P. DETAILED COURSE OUTLINE:

I. Journal
A. Daily hours worked
B. Daily activities/observations
C. Notation of relevance to course work

II. Weekly (40 hr) reports
A. Cumulative hours worked
B. Relevant activities and observations for the week C. Reflections on activities

III. Portfolio
A. Cumulative bi-weekly repmis with instructor feedback B. Site supervisor evaluations
C. Formal Reports
D. Photographs and other appropriate documentation

IV. Co-Op assessment
A. Site Supervisor evaluation(s) B. Instructor evaluation

V. Final Report/presentation

A. Oral presentation to faculty and/or students

B. Summary of Co-Op experience formatted according to instructions in the Co-Op manual.

Q. <u>LABORATORY OUTLINE</u>: None ☒ Yes ☐