

SUNY Canton Mechanical Engineering Technology (MET) - B. Tech. (0235)			Fall 2024
1 <sup>st</sup> Semester		<b>Credit</b>	
MATH 123	Pre-Calculus	4	
MECH 121	Manufacturing Processes I	3	
ENGS 101	Introduction to Engineering	2	
PHYS 121/131	College/University Physics I	3	
PHYS 125/135	Physics Lab 1	1	
MECH 101	Drawing for Engineers	1	
		14	
2 <sup>nd</sup> Semester			
MATH 161	Calculus I	4	
ENGL 101	Composition & The Spoken Word	3	
PHYS 122/132	College/University Physics II	3	
PHYS 126/136	Physics Lab 2	1	
MECH 102	Parametric Modeling	2	
MECH 122	Introduction to 3D Printing	1	
	Elective <sup>1</sup>	2	
		16	
3 <sup>rd</sup> Semester			
MATH 162	Calculus II	4	
ENGS 201	Statics	3	
MECH 261	MET Electricity	4	
MECH 241/ ENGS 314	Fluid Mechanics / Fluid Mechanics I	3	
MECH 242	Fluid Power Lab	1	
	GER (6, 7, 8, 9, 10, 11) <sup>2</sup>	3	
		18	
4 <sup>th</sup> Semester			
ENGS 203	Engineering Strength of Materials	3	
ENGS 205	Material Science	3	
MECH 221	MET Lab <sup>3</sup>	1	
MECH 301/ ENGS 202	Technical Dynamics/Dynamics	3	
MECH 303	GD&T (Geometric Dimensioning and Tolerancing)	2	
	Diversity Elective	3	
		15	
5 <sup>th</sup> Semester			
	Elective (300 or 400 level) <sup>4</sup>	3	
ENGS 350	Mechanics of Machine Elements	4	
MECH 342	Thermodynamics	3	
MATH 364	Differential Equations	4	
ENGS 102	Programming for Engineers	2	
		16	

6 <sup>th</sup> Semester			
MECH 343	Heat Transfer	3	
MECH 312	Engineering Design	3	
SOET 400	Technical Communication	3	
MATH 141	Statistics	3	
	Elective (300 or 400 level) <sup>4</sup>	3	
		15	
7 <sup>th</sup> Semester			
MECH 377	Capstone Research & Proposal	2	
	Elective (300 or 400 level) <sup>4</sup>	3	
	Elective (300 or 400 level) <sup>4</sup>	3	
	GER (6, 7, 8, 9, 10, 11) <sup>2</sup>	3	
	GER (6, 7, 8, 9, 10, 11) <sup>2</sup>	3	
MKTX 310	Instrumentation and Controls	3	
		17	
8 <sup>th</sup> Semester			
MECH 477	Capstone Project	3	
ECON 370	Engineering Economics	3	
SOET 377	Engineering Ethics <sup>6</sup>	1	
	Elective (300 or 400 level) <sup>4,5</sup>	3	
	Elective (300 or 400 level) <sup>4,5</sup>	3	
		13	

**NOTES:**

- 1 Program electives selected from ACHP, AREA, ENGS, CITA, CONS, ELEC, MATH, MECH, SOET designators and AUTO 104.
- 2 Must complete 7 of 11 GERS and 30 total credits. Required GERS: (1/2), 3, 4, and 5. Need to pick 3 others.
- 3 Writing intensive course requirement.
- 4 Program electives are upper level from all ACHP, AREA, CITA, CONS, ELEC, MATH, PHYS, MECH, MKTX, SOET course listings. Program electives are selected by advisement based on student interest and career goals. BSAD 421 can also be used.
- 5 MECH 480 Co-Op can be equivalent up to 6 credit hours.
- 6 Can substitute SOET 378 or BSAD 319 if desired.

**GER Elective Course must come from the following list:**

Complete 7 of 11 GER's and 30 total credits

GER 1 Communication (Written)	GER 4 Mathematics	GER 7 Social Science	GER 10 World History and Global Awareness
GER 2 Communication (Oral)	GER 5 Natural Science	GER 8 Arts	GER 11 World Languages
GER 3 Diversity	GER 6 Humanities	GER 9 US History and Civic Engagement	

GER's: 1  2  3  4  5  6 \_\_\_\_\_ 7 \_\_\_\_\_ 8 \_\_\_\_\_ 9 \_\_\_\_\_ 10 \_\_\_\_\_ 11 \_\_\_\_\_

**Completed OSHA 10 Hour Safety Course and Certification is on Record: YES/NO**

**Graduation Requirements: Total Semester Credit Hours – 124**