

SUNY Canton Alternative and Renewable Energy Systems (ARES) - B. Tech. (865)				Fall 2014		
Program Coordinator: Michael Newtown Advisors: M. Bullwinkel						
1 st Semester				Credit	Term	Grade
AREA 110	Introduction to Alternative Energy			3		
ENGL 101/102	Exp. Writing -or- Oral and Written Expression		(GER 10)	3		
MATH 123	Pre-Calculus Algebra		(GER 1)	4		
PHYS 121/131	College/University Physics I		(GER 2)	3		
PHY 125	Physics Lab 1		(GER 2)	1		
	GER Elective (3,4,5,6,7,8,9) ¹			3		
				17		
2 nd Semester						
MATH 161	Calculus I		(GER 1)	4		
SOET 116	Introduction to Computer Drafting			2		
PHYS 122/132	College/University Physics II			3		
PHYS 126	Physics Lab 2		(GER 2)	1		
	GER Elective (3,4,5,6,7,8,9) ¹			3		
	Program Elective (100 or 200 level) ²			3		
				16		
3 rd Semester						
MATH 162	Calculus II			4		
ELEC 261	Electricity			4		
MECH 241	Fluid Mechanics			3		
MECH 242	Fluid Power Lab			1		
CHEM 150	College Chemistry I		(GER 2)	4		
				16		
4 th Semester						
ELEC 141	Industrial Controls			2		
ENGS 102	Programming for Engineers			2		
MATH 141	Statistics		(GER 1)	3		
ESCI 101	Intro to Environmental Science		(GER 2)	3		
	GER Elective (3,4,5,6,7,8,9) ¹			3		
	Program Elective (100 or 200 level) ²			3		
				16		
5 th Semester						
AREA 320	Experimentation & Measurement Lab I			3		
MECH 342	Thermodynamics			3		
AREA _____	AREA Elective ³			3		
	GER Elective (3,4,5,6,7,8,9) ¹			3		
	Program Elective (300 or 400 level) ²			3		
				15		

6 th Semester				
AREA 370	Experimentation & Measurement Lab II **	3		
AREA _____	AREA Elective ³	3		
MECH 343	Heat Transfer	3		
BSAD 340	Management Communications	3		
SOET 370	Engineering Project Analysis	3		
		15		
7 th Semester				
ELEC 215	Electrical Energy Conversion	4		
AREA _____	AREA Elective ³	3		
	Program Elective (300 or 400 level) ⁴	3		
ACHP 401	Building Automation Systems	3		
SOET 361	Project Management	3		
		16		
8 th Semester				
MECH 477	Capstone Project	3		
AREA _____	AREA Elective ³	3		
CONS 350	Geographic Information Systems	3		
	GER Elective (3,4,5,6,7,8,9) ¹	3		
	Program Elective (300 or 400 level) ⁴	3		
		15		

NOTES:

- 1 Must complete 5 of 7 GER's 3 through 9.
 - 2 Program electives are lower level (100 or 200) from all ACHP, AREA, CONS, ELEC, MECH, SOET course listing.
 - 3 AREA electives are upper level (300 or 400) from all AREA course listing.
 - 4 Program electives are upper level from all ACHP, AREA, CONS, ELEC, MATH, PHYS, MECH, SOET course listing.
- ** Writing intensive course.

GER Elective Course must come from the following list:

GER 3	Social Science	GER 7	Literature/Humanities
GER 4	American History	GER 8	The Arts
GER 5	Western Civilization	GER 9	Foreign Language
GER 6	Other Worlds		

Complete 5 of 7 GER's 3 through 9

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

Graduation Requirements: Total Semester Credit Hours - 126

STUDENT _____ CERTIFIED FOR GRADUATION YES/NO

SSN _____ CERTIFIED BY _____

CLASS OF _____ G.P.A. 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____ 8 _____