Name: _____ Exp. Grad.: Fall _____ / Spring _____

Renewable Energy Engineering
Curriculum by Semester
(For students entering Fall 2018 – Spring 2019)

Semester 1		***Semester 2***		***Semester 3***		***Semester 4***	
Course (cr. hr.)	***X***	***Course (cr. hr.)***	***X***	***Course (cr. hr.)***	***X***	***Course (cr. hr.)***	***X***
CHEM 105 (4)		CHEM 106 (4)		ENGR 110 (4)		ENGR 220 (4)	
ENGL 101 (4)*		ENGR 104 (2)		ENGR 360 (0)		ENGR 305 (3)	
ENGR 101 (2)		ENGR 11x** (1)		MATH 253 (4)		ENGR 360 (0)	
ENGR 102 (2)		ENGR 11x** (1)		PHYS 126 (4)		MATH 271 (3)	
ENGR 160 (0)		ENGR 160 (0)		RNEW 201 (3)		MECH 212 (3)	
MATH 151 (4)		MATH 152 (4)		RNEW 255 (3)		RNEW 303 (4)	
Hum/SS/Arts (4)		PHYS 125 (4)					
Total (16)		**Total (16)**		**Total (18)**		**Total (17)**	

* If required; does not count towards graduation. ** Select from ENGR 111-116 ENGR Exploration Labs.

Semester 5		***Semester 6***		***Semester 7***		***Semester 8***	
Course (cr. hr.)	***X***	***Course (cr. hr.)***	***X***	***Course (cr. hr.)***	***X***	***Course (cr. hr.)***	***X***
ENGR 306 (2)		ENGR 360 (0)		ENGR 360 (0)		ENGR 360 (0)	
ENGR 360 (0)		ENGR 395 (2)		ENGR 490 (2)		ENGR 490 (2)	
MECH 320 (3)		MECH 326 (3)		MECH 435 (3)		MECH 422 (3)	
MECH 324 (3)		MECH 354 (3)		RNEW 310 (3)		RNEW 431 (3)	
RNEW 320 (4)		Tech Elective (3)		RNEW 468 (3)		RNEW 432 (3)	
RNEW 322 (3)		Hum/SS/Arts (4)		Tech Elective (3)		Hum/SS/Arts (4)	
				Hum/SS/Arts (4)			
Total (15)		**Total (15)**		**Total (18)**		**Total (15)**	

Total Credits: 130

Additional Requirements:

1. AU Global Perspective
2. AU Physical Education Requirement
3. SOE Minimum Credit Requirement: At least 128 credits, excluding physical education
4. SOE GPA requirement and 'D' policy
5. SOE Written Communication Requirement: Typically ENGL 101 and ENGR 110. Some students may be exempt from ENGL 101, which does not count towards the minimum credits required for graduation.
6. SOE Humanities/Social Science/Arts Requirement

Current SOE requirements

Degree Evaluation

Definitions of Electives:

Technical Electives: (1) Most 300- and 400-level courses designated CEMS, CHEM, ENGR, MATH, MECH, PHYS, or RNEW. Exceptions include MATH 331 and some special topic courses. (2) FIN 348 **OR** MGMT 328 qualifies as a technical elective.

Revised: 06/12/2018

Name: _____ Exp. Grad.: Fall _____ / Spring _____

Renewable Energy Engineering (RNEW) Progress toward Degree (1/2)
(For students entering Fall 2018 – Spring 2019)

Directions: Before submitting an ***Application for Graduation*** to the Registrar's Office, students should complete this ***Progress toward Degree Form*** in consultation with their advisor.

Written Communication Requirement	Req. Cr. hrs.	Substitution/Waiver/Transfer & Institution, if not AU	Cr. Hrs. or IP*
ENGL 101 or equivalent	0		
ENGR 110 – Technical Communications	4		
Written Communication Total	**4**		

Humanities / Social Science / Arts Requirement	Substitution/Waiver/Transfer & Institution, if not AU	Designation A,B,C,D,E, II	Cr. Hrs. or IP*
Total Hum/SS/ Arts (≥ 16 cr. hrs.)			

Humanities/Social Science/Arts Additional Requirement	Check if met (X)
At least 16 credits (excluding ENGL 101 and ENGR 110)	
At least 3 Designated Areas	
No more than 4 credit hours of Arts counting towards 16 credits	

Mathematics Requirement	Req. Cr. hrs.	Substitution/Waiver/Transfer & Institution, if not AU	Cr. Hrs. or IP*
MATH 151 – Calculus I	4		
MATH 152 – Calculus II	4		
MATH 253 – Calculus III	4		
MATH 271 – Differential Equations	3		
ENGR 305 – Engineering Statistics	3		
Mathematics Total	**18**		

Chemistry Requirement	Req. Cr. hrs.	Substitution/Waiver/Transfer & Institution, if not AU	Cr. Hrs. or IP*
CHEM 105 – General Chemistry I	4		
CHEM 106 – General Chemistry II	4		
Chemistry Total	**8**		

Physics Requirement	Req. Cr. hrs.	Substitution/Waiver/Transfer & Institution, if not AU	Cr. Hrs. or IP*
PHYS 125 – Physics I	4		
PHYS 126 – Physics II	4		
Physics Total	**8**		

**Enter number of credit hours completed or IP=In progress*

Name: _____ Exp. Grad.: Fall _____ / Spring _____

Renewable Energy Engineering (RNEW) Progress toward Degree (2/2)

(For students entering Fall 2018 – Spring 2019)

Basic Engineering Requirement	Req. Cr. hrs.	Substitution/Waiver/Transfer & Institution, if not AU	Cr. Hrs. or IP*
ENGR 101 – Introduction to Engineering	2		
ENGR 102 – Computer Aided Design	2		
ENGR 104 – Computer Aided Engineering	2		
ENGR 111-116 (pick 2) – Explorations	2		
Basic Engineering Total	**8**		

Renewable Energy Engineering Requirement	Req. Cr. hrs.	Substitution/Waiver/Transfer & Institution, if not AU	Cr. Hrs. or IP*
ENGR 220 – Circuit Theory I	4		
ENGR 306 – Engineering Economy	2		
ENGR 395 – Engineering Design	2		
ENGR 490 – Senior Capstone Group Project	2		
ENGR 490 – Senior Capstone Group Project	2		
MECH 212 – Dynamics	3		
MECH 320 – Thermodynamics I	3		
MECH 324 – Fluid Mechanics I	3		
MECH 326 – Heat Transfer	3		
MECH 354 – Mechatronics	3		
MECH 422 – Control Systems	3		
MECH 435 – Industrial Control via Microcontroller	3		
RNEW 201 – Renewable Energy	3		
RNEW 255 – Power System Operation & Economics	3		
RNEW 303 – Software Engineering	4		
RNEW 310 – Fuel Cell Principles & Technology	3		
RNEW 320 – Circuit Theory II	4		
RNEW 322 – Signals & Systems	3		
RNEW 431 – Wind Energy	3		
RNEW 432 – Solar Energy Systems	3		
RNEW 468 – Electric Machinery	3		
Technical Elective I	3		
Technical Elective II	3		
Renewable Energy Engineering Total	**68**		

Additional Requirements	Substitution/ waivers, if any	Check if Met (X)
Engineering seminar		
Global Perspective		
ENGR GPA and "D" Policy	N/A	
Physical Education / Wellness I		
Physical Education / Wellness II		
Total Eligible Credits ≥ 130	**(excluding ENGL 101 & Phys. Ed. Credits)**	

**Enter number of credit hours completed or IP=In progress*

Revised: 06/12/2018