

ASSOCIATE OF ARTS DEGREE

Alternative Energy – Solar

The Alternative Energy Program – Solar provides engineering and science students with a unique applied foundation in solar technologies and applications. The program emphasizes learning through classroom and applied research projects. The curriculum below is the result of a cooperative agreement between Crowder College and the School of Engineering at the Missouri University of Science and Technology (Rolla); cooperative programs are available at Missouri State University and Pittsburg State University. Students in the Alternative Energy - Solar program include Alternative Energy, Engineering, Science, and Technology majors. Students are required to take the entry level NABCEP Solar PV exam given as part of the ENER 260 course. Students must also report their score to the College for completion of this degree program.

Program of Study

Orientation		1 hour	
COLL	101		
Communications		9 hours	
Written Communications (6 hours)			
ENGL	101*		
ENGL	102*	OR	ENGL 104*
Oral Communications (3 hours)			
COMM	104*		
Humanities		9 hours	
Fine Arts (3 hours)		Additional Humanities (3 hours)	
ART	101	ART	101
MUSC	101	ASL	101, 102*
TA	205	ENGL	109, 120, 125
		FREN	101
Literature (3 hours)		HIST	101*
ENGL	109, 120, 125	MUSC	101
		PHIL	101*, 110*, 121, 201*, 202*
		SPAN	101
		SWK	219
		TA	205
Mathematics		5 hours	
MATH	111* & 112* 150* & 160*		
Physical Education		2 hours	
PE	113	OR two of the following:	
		PE	102, 103, 104, 105, 110, 111, 114, 116, 117, 118, 144, 145, 204*, 205*, 216*, 244*, 245*
Science		10 hours	
Biological Science (5 hours)		Physical Science (5 hours)	
BIOL	101	CHEM	101, 111* (5)
		PHYS	101 (5)
		PHYS	190* (5)
Social and Behavioral Science		9 hours	
Missouri Constitution (3 hours)		Add'l Social Sciences (3 hours)	
HIST	106*	ECON	202*
PLSC	103*, 104*		
Additional (3 hours)			
ECON	201*	PLSC	103*, 104*, 205*
GEOG	111	PSYC	101, 210*, 215*
HIST	101*, 102*, 106*, 107*	SOC	101, 103*
PHIL	110*, 121		
Major Courses		19 hours	
AMT	112	ENER	250*
ENER	105	ENER	251*
ENER	150	ENER	260*
		ENER	261*

Suggested Plan of Study

FIRST YEAR

Fall Semester	Hours
BIOL 101 Biology	5
COLL 101 College Orientation	1
ENER 105 Introduction to Energy	3
ENGL 101 English Composition	3
MATH 111 College Algebra	3
PLSC 103 Nat'l, State, Local Gov't	3
TOTAL	18

Spring Semester	Hours
AMT 112 Occupational Safety	3
ENER 250 Solar Thermal Systems	3
ENER 251 Solar Thermal Lab	2
ENGL 102 Advanced English Comp	3
MATH 112 Trigonometry	3
Approved Physical Education Course	2
TOTAL	16

SECOND YEAR

Fall Semester	Hours
COMM 104 Fundamentals of Speech	3
ENER 150 Passive Solar	3
Approved Fine Arts Course	3
Approved Literature Course	3
Approved Physical Science Course	5
TOTAL	17

Spring Semester	Hours
ECON 202 Principles of Econ II	3
ENER 260 Solar Electric Energy	3
ENER 261 Solar Electric Lab	2
Approved Humanities Course	3
Approved Soc & Behavioral Science Course	3
TOTAL	14

TOTAL HOURS REQUIRED 65

*Prerequisite required

This Suggested Plan of Study is based on course offerings at the Neosho Campus and online. Adjustments in scheduling may need to be made based on other campus course offerings. This is just one possible plan. The length of time to complete the program may vary for each student. In addition, based on placement results, individuals may need to take additional courses for academic remediation.