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.

Orientation		***1 hour***			
	COLL 101*				
Communications		***9 hours***			
	Written Communications (6 hours)				
	ENGL 101*				
	ENGL 102*		**OR**	ENGL 104*	
	Oral Communications (3 hours)				
	SPCH 101*				
Humanities		***9 hours***		***Additional Humanities (3 hours)***	
	Fine Arts (3 hours)			ART 101	
	ART 101			ASL 101, 102	
	MUSC 101			ENGL 109, 120, 125	
	TA 205			FREN 101	
	Literature (3 hours)			HIST 101	
	ENGL 109, 120, 125			HUM 102, 103	
				MUSC 101	
				PHIL 101, 110, 121, 201, 202	
				SPAN 101	
				TA 205	
Mathematics		***5 hours***			
	MATH 111* & 112*			MATH 150* & 160*	
Physical Education		***2 hours***		***OR two of the following:***	
	PE 113			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)			***OR***	
	PLSC 103, 104*			HIST 106	
	Additional Social Science (3 hours)				
	ECON 202				
	Additional (3 hours)				
	ECON 201			PLSC 103, 104*, 205	
	GEOG 101			PSYC 101, 210*, 215*	
	HIST 101, 102, 106, 107			SOC 101, 103	
	PHIL 110, 121				
Major Courses		***18 hours***			
	ENER 105 Intro to Energy (3)				
	ENER 150 Passive Solar Sys* (3)			AMT 112 Occupational Safety (3)	
	ENER 250 Solar Thermal Sys* (3)			ENER 251 Solar Thermal Lab* (2)	
	ENER 260 Solar Electric Sys * (3)			ENER 261 Solar Electric Lab*(2)	

*Prerequisite requirement