Pre-engineering.htm

Pre-engineering at UAM is a 2-year pre-program designed to provide students with the core engineering curriculum in math, science, and humanities courses that form the foundation for most of the engineering programs in the state of Arkansas. During the two years of this program, students are expected to take most of the classes they would usually take during the first two years at any of the schools and colleges of engineering in the state. An Associate's degree is given by UAM after completion of the pre-engineering program.

Fall Semester Year 1		hr	Spring Semester Year 1		hr
+MATH 1033	Trigonometry	3	MATH 2255	Calculus I	5
+MATH 1043	College Algebra	3	CHEM 1103	General Chemistry I	3
BIOL 1063	Intro. to Biological Science	3	CHEM 1121	General Chemistry I Lab	1
ENGL 1013	Composition I	3	ENGL 1023	Composition II	3
PE 2203	Health & Wellness Promotion	3	ECON 2203	Prin. of Macroeconomics	3
*	Social Science Elective I	3		Am. History or Am. Nat Gov	3
Total Hours		18	Total Hours		18

Fall Semester Year 2		hr	Spring Semester Year 2		hr
MATH 3495	Calculus II	5	MATH 3543	Calculus III	3
PHYS 2313	University Physics I	3	PHYS 2323	University Physics II	3
PHYS 2231	Coll. and Univ. Physics I Lab	1	PHYS 2231	Coll. and Univ. Physics II Lab	1
ENGL 2283 or	Survey of World Lit I OR	3	ART 1053	Art Appreciation OR	3
ENGL 2293			or		
	Survey of World Lit II		MUS 1113	Music Appreciation	
*	Social Sciences II	3	***	MATH Elective	3
**	Communication	3	****	General Elective	3
Total Hours		18	Total Hours		16

⁺Students with appropriate background in mathematics and an ACT math score of 24 can take Calculus I in place of Trigonometry and College Algebra.

If possible, you should take University Physics III with lab prior to transfer

See course options below and links to engineering schools on the following page

Course Options

*	Social Sciences (6 hrs) Choose two courses from two different disciplines						
ANTH 2203	Cultural Anthropology	3	PHIL 2223	Introduction to Philosophy	3		
GEOG 2213	General Geography I	3	PSY 1013	Introduction to Psychology	3		
GEOG 2223	General Geography II	3	SOC 2213	Introduction to Sociology	3		
HIST 1013	Survey of Civilization I	3	SWK 1013	Introduction to Social Work	3		
HIST 1023	Survey of Civilization II						
**	Communications (3 hrs) Choose one course from the following						
COMM 1023	Public Speaking	3	COMM 2203	Interpersonal Communication	3		
COMM 2283	Business & Professional Spch	3					
***	Math Elective (Choose one of these; however, both are recommended if possible						
MATH 3533	Differential Equations	3	MATH 3463	Linear Algebra	3		
	(Spring Odd Years)			(Spring Even Years)			
****	General Elective (Choose minimum of 1; however all are recommended if possible)						
CIS 2203	Programming Logic & Design	3	CHEM 1113	General Chemistry II	4		
			And	And			
			CHEM 1131	General Chemistry II lab			
ESCI 1063	Elements of Geology and	4	GNEG 1111	Intro. to Engineering I	1		
ESCI 1051	Elements of Geology Lab		GNEG 1121	Intro to Engineering II	1		
			(UAF courses)	(available online through UAF)			

Links to engineering programs in the region:

University of Arkansas (Fayetteville)- College of Engineering https://engineering.uark.edu/
University of Arkansas (Little Rock)- College of Engineering and Information Technology http://www.astate.edu/eit/
Arkansas State University - College of Engineering & Computer Science https://www.astate.edu/college/ecs/
Arkansas Tech University - Engineering Program http://www.atu.edu/engineering/
Cossatot Community College of the University of Arkansas - Engineering Technology https://www.atu.edu/engineering/
East Arkansas Community College - Engineering Design Technology https://www.atu.edu/engineering/
University - Engineering & Physics https://www.atu.edu/engineering/
John Brown University - Engineering Major https://www.jbu.edu/majors/engineering/

Other helpful links:

Search for engineering jobs by engineering discipline or location http://www.engineerjobs.com/

U.S. Army engineering jobs

http://www.goarmy.com/careers-and-jobs/stem/about-army-stem/engineering-jobs.html

List of engineering schools

http://en.wikipedia.org/wiki/List_of_engineering_schools#United_States