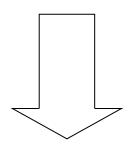
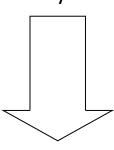
# **Biosystems Engineering Pathway**

## Arizona Western College Associates of Engineering



University of Arizona– Yuma Bachelor's in Biosystems Engineering



Food and Agricultural Science Careers

## CAREERS

- Design Engineer
- Plant Manager
- Project Engineer
- Environmental Consultant
- Research Engineer
- Sales Representative
- Process Engineer

### **EMPLOYERS**

- Biotechnology laboratories
- Chemical engineering firms
- Environmental consulting firms
- Food manufacturers
- Government agencies
- Paper and fiber products companies
- Recycling and waste management companies
- Universities and colleges
- Wood products manufacturers
- Biofuel industry



Arizona Western College & The University of Arizona - Yuma Academic Program Bachelor of Science - Biosystems Engineering 2017-2018 Curriculum Check List UNOFFICIAL PLANNING GUIDE



#### ARIZONA WESTERN COLLEGE COURSES ARIZONA GENERAL EDUCATION (AGEC-S)

AKIZUNA GENEKAL EDU	CAIL	<u> </u>
Course	Units	COMPLETED
A. Freshman Composition		
a) ENG 101 Fresh. Comp.	3	
<b>b</b> ) ENG102 Fresh. Comp.	3	
<b>B.</b> Mathematics		
a)+MAT 220 Calculus I	5	
C. Arts and Humanities		
a) PHI 105 Intro Ethics (rec,WI	) 3	
<b>b</b> ) Arts	3	
D. Social and Behavioral Sci	ences	
a) ECN 250 Microecon.(sugg)	3	
<b>b</b> ) ECN 240 Macroecon (rec)	3	
E. Physical and Biological Sc	iences	
a)+CHM 151 Gen. Chemistry	I 4	
<b>b</b> )+CHM 152 Gen. Chemistry	II 4	
F. Additional Courses		
a)+MAT 262 Intro. Diff. Equ.	3	
<b>b</b> )+PHY 121 Gen Physics II	4	

AGEC-S Units 38 Select courses from AWC AGEC-S Curriculum Course List

#### Major Area Support Courses (AWC)( 25 credits)

+MAT 230 Calc II w/Ana. Geo	5	
+MAT 241 Calc III w/Anal. Geo.	4	
+PHY 131 Gen. Physics II	4	
PLS 100 Plant Science	4	
OR		
BIO 181 General Biology	4	
+EGR123 Intro. Struct. Program	3	
+EGR188 Fund. Engr Design	4	

#### AS in Engineering 65 Total Units

Completion of AGEC-S and selected coursework would permit a student eligibility for an AS in Engineering through AWC. AGEC completion must be listed on transcripts

+Indicates prerequisite courses to apply into UA program

#### For Information Contact:

AWC Advisement Services (928) 344-7624 <u>advising@azwestern.edu</u>

#### UNIVERSITY OF ARIZONA-YUMA COURSES

Major Courses-Biosystems Egr	Units C	OMPLETED
ABE 201 Intro to Biosystems	2	
ABE 205 Egr Analytic Comp. Skill	s 3	
ABE 221 Intro to CAD	3	
ABE 393 Internship*	3	
ABE 423 Biosystems Analysis	3	
ABE 455 Soil & Water Egr	3	
ABE 475A Physio. Plant Prod.	3	
BIO 182 General Biology II	4	
OR		
BIO 205 Microbiology	4	
CE 214 Statics	3	
CE 218 Mechanics of Fluids	3	
ENVS 316 Soil Fertility	3	
SIE 265 Egr Management	3	
SIE 305 Egr Prob & Stats	3	
Choose 1		
AGTM 422 Comm. Knowledge	3	
ENGV 308 Technical Writing	3	
	~	

#### **University of Arizona-Tucson Courses**

ABE 284 Biosystems Thermal Egr	3	
ABE 423 Biosys. Analysis & Design	3	
ABE 447 Sensors and Controls	3	
ABE 484 Adv. Biosys. Transport	3	
ABE 496A Seminar Egr Careers	1	
ABE 498A Cross Discipline Design	3	
ABE 498B Cross Discipline Design	3	
AME 324A Mech. Behav. Materials	3	
	U	

\*May be completed at either Tucson or Yuma Campus

#### <u>Minor Options-Select from the following options(18</u> <u>credits):</u>

- Systems Engineering
- Computer Science
- Math
- Plant Science

#### Total Credits for Graduation128

Associate's Degree AWC Units	65	units
UA Units (30 units min.)	66	units
Total Units (Bachelors)	128	units
Minor	18	units

Math satisfies 2<sup>nd</sup> language proficiency (Spanish 102, etc.) requirement

UA Yuma Advisor: Tanya Hodges (928)271-9560

<u>thodges@cals.arizona.edu</u> Ag Science Building Room 137

