

Biosystems Engineering BS Curriculum – Yuma Campus

General Education Requirements	Course	23 Units
First Year Composition 1	ENGL 101 (AGEC-S/IGETC)	3
First Year Composition 2	ENGL 102 (AGEC-S/IGETC)	3
General Education, Natural Science	Chem 151 (AGEC-S/IGETC)	
General Education, Artist	(AGEC-S/IGETC)	3
General Education, Social Scientist	(AGEC-S/IGETC)	3
General Education, Humanist	(AGEC-S/IGETC)	3
General Education, Building Connections 1	(AGEC-S/IGETC)	3
General Education, Building Connections 2	(AGEC-S/IGETC)	3
General Education, Building Connections 3	CE 301 (or ENGL 307, ENGL 308)	
Bookend University Gen Eds	UNV	2
General Science & Math Core	Course	42 Units
Calculus I	MATH 220 (AGEC-S/IGETC)	5
Calculus II	MATH 230 (AGEC-S/IGETC)	5
Vector Calculus	MATH 241 (AGEC-S/IGETC)	4
Differential Equations	MATH 262 (AGEC-S/IGETC)	3
Probability and Statistics	SIE 305 (UAZ Yuma)	3
General Chemistry I	CHEM 151 (AGEC-S/IGETC)	4
General Chemistry II	CHEM 152 (AGEC-S/IGETC)	4
Physics I	PHYS 121 (AGEC-S/IGETC)	4
Physics II	PHYS 131 (AGEC-S/IGETC)	4
Biology I	BIO 181 (AGEC-S/IGETC)	3
Biology II	ECOL 182 (AGEC-S/IGETC)	3
Engineering Science Core	Course	21 Units
Intro to Engineering	EGR 188 (AGEC-S/IGETC)	3
Statics	EGR 251 (AGEC-S/IGETC)	3
Fluid Mechanics	CE 218, UAZ Yuma section	3
Design of Experiments	SIE 330R	3
Engineering Management	SIE 265, UAZ Yuma	3
Senior Capstone Design I	BE 498A, UAZ Yuma	3
Senior Capstone Design II	BE 498B, UAZ Yuma	3
Biosystems Engineering Core	Course	20 Units
Intro to Biosystems Engineering	BE 201, UAZ Yuma section	2
Engineering Analytic Computer Skills	BE 205, UAZ Yuma section	3
Intro to Computer-aided Design	BE 221, UAZ Yuma section	3
Biosystems Thermal Engineering	BE 284, UAZ Yuma section	3
Intro to Biosystems Analytics	BE 310, UAZ Yuma section	3
Biosystems Analysis and Design	BE 423, UAZ Yuma section	3
Sensors & Controls	BE 447, UAZ Yuma section	3
Career Preparation	Course	5 Units
Technical Writing	CE 301 (or ENGL 307, 308, ALC 422), UAZ Yuma section	3
Seminar in Biosystems Careers & Professionalism OR	BE 496A, UAZ Yuma section	1
Systems and Industrial Engineering Sophomore Colloquium	SIE 295S, UAZ Yuma	1
Internship	BE 493, UAZ Yuma	1

Technical Electives (Select 9 units from this list)	Course	9 Units
Embedded Comp. Sys. (Mechatronics)	SIE 370, UAZ Yuma section	4
Biosystems Analytics	BE 434, UAZ Yuma section	3
Plant Physiology	PLS 475, UAZ Yuma section	3
Agronomy Foundations	ASM 490, PLS 497, UAZ Yuma	3
Design Electives	Course	9 Units
Precision Observation with Drones	BE 385, UAZ Yuma section	3
Soil and Water Resources Engineering	BE 455, UAZ Yuma section	3
Remote Sensing Data and Methods	BE 485, UAZ Yuma section	3
Total		129