



**The University of Arizona - Yuma**  
**Biosystems Engineering**  
**2020-2021 IVC Curriculum Check List**



<b>A. General Education Requirement</b>						<b>Status</b>
IGETC-CSU						Approved
CSU GEB- English 201 Required in Area A.3						Approved
Recommendation: Use lower division major prep to fulfill general education pattern requirements.						
<b>B. Lower Division Major Requirements</b>						
<b>Category</b>	<b>U of A Course</b>	<b>IVC Equivalent</b>	<b>Articulation Status</b>	<b>IGETC-CSU</b>	<b>CSUGEB</b>	<b>Notes</b>
<b>Composition</b>						
First Year Composition	ENGL 101	ENGL 110	Approved	Area 1A	Area A2	Equivalent Course
First Year Composition	ENGL 102	ENGL 201 or 204	Approved	Area 1B	Area A3	Equivalent Course
<b>Mathematics</b>						
Calculus I with Applications	MATH 122B	MATH 192	Approved	Area 2	Area B4	Equivalent Course
Calculus II	MATH 129	MATH 194	Approved	Area 2	Area B4	Equivalent Course
Calculus Vector Calculus	MATH 223	MATH 210	Approved	Area 2	Area B4	Equivalent Course
Ordinary Differential Equations	MATH 254	MATH 220	Approved	Area 2	Area B4	Equivalent Course
<b>Science</b>						
Biology I	MCB 181/181L	BIOL 180	Approved	Areas 5B & 5C	Area B2 & B3	Equivalent Course
Biology II	ECOL 182/182L	BIOL 182	Approved	Areas 5B & 5C	Area B2 & B3	Equivalent Course
General Chemistry I	CHEM 151	CHEM 200	Approved	Areas 5A & 5C	Area B1 & B3	Equivalent Course
General Chemistry II	CHEM 152	CHEM 202	Approved	Areas 5A & 5C	Area B1 & B3	Equivalent Course
Introductory Mechanics	PHYS 141	PHYS 200	Approved	Areas 5A & 5C	Area B1 & B3	Equivalent Course
Intro. Electricity and Magnetism	PHYS 241	PHYS 202	Approved	Areas 5A & 5C	Area B1 & B3	Equivalent Course
<b>Engineering</b>						
Intro to Engineering	ENGR 102	AWC: EGR 188 (Prerequisites: Pre-calculus or College Algebra and Trig or approved higher level math course)				
Statics	CE 214	ENGR 210 (Articulation Pending)				
Mechanics of Fluids	CE 218	Complete at U of A Yuma (Prerequisite: IVC ENGR 210,				
Intro to Biosystems Engineering	BE 201	Complete at U of A Yuma (Prerequisite: IVC MATH 192)				
Engr. Analytic Computer Skills	BE 205	Complete at U of A Yuma (Prerequisite: IVC MATH 192)				
Intro to Computer Aided Design	BE 221	Complete at U of A Yuma (No Prerequisite)				
Biosystems Thermal Engineering	BE 284	Complete at U of A Yuma (Prerequisites: IVC MATH 194 & Phys 200)				
Engineering Management I	SIE 265	Complete at U of A Yuma (Prerequisites: IVC Math 194 and U of A ENGR 102 or AWC EGR 188)				

**Online Advising is available:**

To schedule an online appointment with a Univ. of Arizona advisor please contact:  
 IVC Transfer Center Office Assistant Edgar Espinoza at 760 355 6274 or email at [edgar.espinoza@imperial.edu](mailto:edgar.espinoza@imperial.edu)

Students desiring an IVC associate degree should work with an IVC counselor to determine the degree that will best suit their academic and career goals.