

### Universal General Education Transfer Component (UGETC)

English Composition (6 SCH)			The following two English composition courses are required.					
Prefix	Course Name	Credit Hours	Pre-requisites	University Course Equivalent	Credit Hours	Required or Preferred by Major	Notes	
ENG 111	Expository Writing	3	None	RC 1000	3	Required		
ENG 112	Argument-Based Research	3	ENG 111	RC 2001	3	Required		
<b>Total Credit Hours Required</b>		<b>6</b>			<b>6</b>			

Humanities/Fine Arts (6 SCH)			Students will select two courses from at least two different disciplines:					
Prefix	Course Name	Credit Hours	Pre-requisites	University Course Equivalent	Credit Hours	Required or Preferred by Major	Notes	
ART 111	Art Appreciation	3	None	ART 2011	3			
ART 114	Art History Survey I	3	None	ART 2030	3			
ART 115	Art History Survey II	3	None	ART 2130	3			
COM 231	Public Speaking	3	None	COM 2101	3			
ENG 231	American Literature I	3	ENG 112, 113 or 114	ENG 2350	3			
ENG 232	American Literature II	3	ENG 112, 113 or 114	ENG 2350	3			
MUS 110	Music Appreciation	3	None	MUS 2011	3			
MUS 112	Introduction to Jazz	3	None	MUS 2014	3			
PHI 215	Philosophical Issues	3	ENG 111	PHL Elective	3			
PHI 240	Introduction to Ethics	3	ENG 111	PHL 2000	3			
<b>Total Credit Hours Required</b>		<b>6</b>			<b>9</b>			

Social/Behavioral Science (6 SCH)			Students will select two courses from at least two different disciplines:					
Prefix	Course Name	Credit Hours	Pre-requisites	University Course Equivalent	Credit Hours	Required or Preferred by Major	Notes	
ECO 251	Principles of Microeconomics	3	None	ECO 2030	3			
ECO 252	Principles of Macroeconomics	3	None	ECO 2040	3			
HIS 111	World Civilizations I	3	None	HIS 1101	3			
HIS 112	World Civilizations II	3	None	HIS 1102	3			
HIS 131	American History I	3	None	HIS 1200	3			
HIS 132	American History II	3	None	HIS 1200	3			
PSY 150	General Psychology	3	None	PSY 1200	3			
POL 120	American Government	3	None	P S 1100	3			
SOC 210	Introduction to Sociology	3	None	SOC 1000	3			
<b>Total Credit Hours Required</b>		<b>6</b>			<b>6</b>			

Mathematics (8 SCH)			Students will select two course from the following:					
Prefix	Course Name	Credit Hours	Pre-requisites	University Course Equivalent	Credit Hours	Required or Preferred by Major	Notes	
MAT 171	Precalculus Algebra	4	None	MAT 1020	4			
MAT 172	Precalculus Trigonometry	4	MAT 171	MAT 1025	4			
MATH 263	Brief Calculus	4	MAT 171	MAT 1030	4			
MATH 271	Calculus I	4	MAT 172	MAT 1110	4	Required		
<b>Total Credit Hours Required</b>		<b>8</b>			<b>8</b>			

Natural Sciences (8 SCH)			Students will select 8 SCH from the following courses:					
Prefix	Course Name	Credit Hours	Pre-requisites	University Course Equivalent	Credit Hours	Required or Preferred by Major	Notes	
AST 151/151A	General Astronomy I and lab I	4	None	AST 1001	4			
BIO 110	Principles of Biology	4	None	BIO 1201/BIO 1204	4			
BIO 111	General Biology I	4	None	BIO 1201/BIO 1204	4		must take both BIO 111 and BIO 112	
BIO 112	General Biology II	4	BIO 111	BIO 1202/BIO 1205	4		must take both BIO 111 and BIO 112	
CHM 151	General Chemistry I	4	None	CHE 1101/CHE 1110	4		must take both CHM 151 and CHM 152	
CHM 152	General Chemistry II	4	CHM 151	CHE 1102/CHE 1120	4		must take both CHM 151 and CHM 152	
GEL 111	Introduction Geology	4	None	GLY 1101	4			
PHY 110/110A	Conceptual Physics and Lab	4	None	PHY 1100	4		must take course with lab	
PHY 151	College Physics I	4	MAT 171	PHY 1103	4		must take PHY 151 and PHY 152	
PHY 152	College Physics II	4	PHY 151	PHY 1104	4		must take PHY 151 and PHY 152	
PHY 251	General Physics I	4	MAT 271	PHY 1150	4		must take PHY 251 and PHY 252	
PHY 252	General Physics II	4	MAT 272 and PHY 251	PHY 1151	4		must take PHY 251 and PHY 252	
<b>Total Credit Hours Required</b>		<b>8</b>			<b>8</b>			

<b>Total UGETC Hours</b>	<b>34</b>	<b>34</b>
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**Additional General Education Courses (11-12 SHC) : These courses must be classified as UGETC or general education within the CAA.**

Prefix	Course Name	Credit Hours	Pre-requisites	University Course Equivalent	Credit Hours	Category	Notes
MAT 272	Calculus II	4	MAT 271	MAT 1120	3	GEC	Required for major
CSC 120	Computing Fundamentals I	3		C S Elective	3	GEC	Prereq for CSC 130
UGETC/GEC		3			3	UGETC/GEC	
UGETC/GEC		3			3	UGETC/GEC	
<b>Total Credit Hours Required</b>		<b>13</b>			<b>13</b>		

**Total General Education Hours Required** 47 47

**Other REQUIRED HOURS (14-15 SHC): These courses must be classified as pre-major, elective or general education within the CAA.**

Prefix	Course Name	Credit Hours	Pre-requisites	University Course Equivalent	Credit Hours	Category	Notes
ACA 122	College Transfer Success	1	None		1	GEC	required by CAA
MAT 280	Linear Algebra	3	MAT 271	MAT 2240	3	Pre-Major	Required by major
CSC 130	Computing Fundamentals II	4	CSC 120	C S 1440	4	Pre-Major	Required by major
Pre-Major/GEC/Elective		3			3	Pre-Major/GEC/Elective	
Pre-Major/GEC/Elective		3			3	Pre-Major/GEC/Elective	

**Other Required Hours (15-16 SCH)** 14 14

**Total Semester Credit Hours in Program: 61**

**3rd - 4th Year Plan: Mathematics, Computation**

Semester	Course	Hours	Notes	
SU	MAT 2240 Linear Algebra	3	If taken at community college, start coursework in the fall	7
SU	CS 1440 Computer Science I	4	If taken at community college, start coursework in the fall	
5	MAT 2110 Techniques and Proofs	3	If taken at community college, take Free Elective	16
5	MAT 2310 Computational Mathematics	3	Major Requirement	
5	CS 2440 Computer Science II	4	Major Requirement	
5	CS 1100 Discrete Mathematics	3	Corequisite for CS 2400	
	Free Elective	3		
5	MAT 3110 OR 3220	3	Writing in the Discipline	16
6	CS 3460 Data Structures	3	Major Requirement	
6	CS 3430 Database	3	Major Requirement	
6	MAT 4310 Numerical Methods	4	Major Requirement	
6	Free Elective	3	Major Requirement	6
SU	Science Concentration Course 1	3	Major Requirement	
SU	MAT or STT Approved Elective 1	3	Major Requirement	15
7	STT 3850 Statistical Data Analysis I	3	Major Requirement	
7	MAT or STT Approved Elective 2	3	Major Requirement	
7	MAT or STT Approved Elective 3	3	Major Requirement	
7	Science Concentration Course 2	3	Major Requirement	
7	Free Elective	3		13
8	MAT 4040 Mathematics Capstone	1	CAPSTONE	
8	MAT or STT Approved Elective 4	3	Major Requirement	
8	MAT or STT Approved Elective 5	3	Major Requirement	
8	Science Concentration Course 3	3	Major Requirement	
8	Free Elective	3	Take enough free electives to reach 122 hours required for graduation	13
				66-73
				61 transfer hours
				127-134 hours for graduation

- If Calculus II (MAT 272) is not offered at the community college attending, it is recommended that students transfer after completing 30 hours of coursework.
- Many summer courses are offered. Students are encouraged to take summer classes, when available, to ensure completion of degree in a timely manner and so not to overload semesters.
- A contract with a list of the approved courses MUST be filed with the College of Arts & Sciences Dean's Office no later than the end of the first semester of junior year.

**Residency Requirements:**

- 31 hours must be from ASU
- 18 hours in the major must be from ASU
- 9 hours in the minor must be from ASU
- Final 30 hours must be courses taken through ASU (includes internships, study abroad taken through ASU)