



ISU

USU

Required by USU Major

Course	Cr	Course	Cr	Course Title	BE ⁵	CI ⁵	EN ⁵	CM ⁵	EL ⁵	ME ⁵
No Equivalent		BENG 1200	2	SolidWorks	X					
No Equivalent		BENG 1880	3	Quantitative Biological Processes	X					
No Equivalent		BENG 2330	3	Properties of Biological Materials	X					
ME 3307	3	BENG 2400	3	Biological/Environmental Thermodynamics	X		X			
BIOL 1100 + 1100L	3	BIOL 1010	3	Biology and the Citizen		X	X			
BIOL 1101 + 1101L + 1102 + 1102L	4+4	BIOL 1610 + 1615	3+1	Biology I + Lab	X					
No Equivalent		BIOL 3300	4	General Microbiology	X					
See Advisor		CEE 1400	2	Introduction to Computer Programming		X	X			
CE 1120	2	CEE 1880	1	Orientation & Computer Applications		X	X			
CE 3301	3	CEE 2240	3	Engineering Surveying		X	X			
CE 1105	2	CEE 2270	2	Computer Engineering Drafting		X	X			
CHEM 1111	4	CHEM 1210	4	Principles of Chemistry I	X	X	X			X
CHEM 1111L	1	CHEM 1215	1	Chemical Principles Lab I	X	X	X			X
CHEM 1112	3	CHEM 1220	4	Principles of Chemistry II			X			
CHEM 1112L	1	CHEM 1225	1	Chemical Principles Lab II			X			
CHEM 3301	3	CHEM 2300	3	Principles of Organic Chemistry	X		X			
CHEM 3303	1	CHEM 2315	1	Organic Chemistry Lab I	X					
BIOL 4432	3	CHEM 3700	3	Introductory Biochemistry	X					
BIOL 4437 or CHEM 4438	1	CHEM 3710	1	Introductory Biochemistry Lab	X					
CS 1181	3	CS 1400	4	Intro to Computer Science - CS 1	X	X	X			X
No Equivalent		CS 2420	3	Algorithms & Data Structures - CS 3				X		
See Advisor		ECE 1400	4	Computer Programming I				X ¹	X ¹	
See Advisor		ECE 1410	3	Computer Programming II				X	X	
See Advisor		ECE 2250	3	Electrical Circuits 1				X	X	
See Advisor		ECE 2290	3	Electrical Circuits 2				X	X	
See Advisor		ECE 2700	4	Digital Circuits				X	X	
ENGL 1101	3	ENGL 1010	3	Introduction to Writing: Academic Prose	X	X	X	X	X	X
No Equivalent		ENGL 2010	3	Intermediate Writing: Research Writing	X	X	X	X	X	X
CE/ME 2210	3	ENGR 2010	3	Engineering Mechanics Statics	X	X	X			X
CE/ME 2220	3	ENGR 2030	3	Engineering Mechanics Dynamics		X	X			X
ME 3350	3	ENGR 2140	3	Mechanics of Materials	X	X				X
See Advisor		ENGR 2210	3	Fundamental Electronics	X	X ²				X
No Equivalent		ENGR 2450	3	Numerical Methods	X					
GEOL 1101	3	GEO 1110	3	Physical Geology		X				
GEOL 1101L	1	GEO 1115	1	Physical Geology Lab		X				
No Equivalent		MAE 1010	3	Introduction to Mechanical Engineering						X
No Equivalent		MAE 1200	2	Engineering Graphics	X					X
No Equivalent		MAE 2160 + 2165	3+1	Material Science + Lab						X
ME 3307	3	MAE 2300	3	Thermodynamics I		X ²	X			X
No Equivalent		MAE 2450	3	Engineering Numerical Methods						X
MATH 1170	4	MATH 1210	4	Calculus I	X	X	X	X	X	X
MATH 1175	4	MATH 1220	4	Calculus II	X	X	X	X	X	X
MATH 2275	4	MATH 2210	3	Multivariable Calculus		X			X	X
See Below ⁴		MATH 2250	4	Linear Algebra & Differential Equations	X	X	X			X
MATH 2240	3	MATH 2270	3	Linear Algebra				X	X	
MATH 3360	3	MATH 2280	3	Ordinary Differential Equations				X	X	
No Equivalent		MATH 3310	3	Discrete Mathematics				X		
No Equivalent		MATH 5710	3	Introduction to Probability				X ³	X	
PHYS 2211	4	PHYS 2210	4	Physics for Scientists and Engineers I	X	X	X	X	X	X
PHYS 2213	1	PHYS 2215	1	Physics for Scientists and Engineers Lab I	X	X	X	X	X	X
PHYS 2212	4	PHYS 2220	4	Physics for Scientists and Engineers II				X	X	X
PHYS 2214	1	PHYS 2225	1	Physics for Scientists and Engineers Lab II				X	X	X
No Equivalent		STAT 3000	3	Statistics for Scientists	X		X	X ³		



ACADEMIC YEAR

2022-23

¹Electrical and Computer Engineering requires C++. C will be evaluated on a case by case basis.

²Civil Engineering students can choose one out of ENGR 2210 and MAE 2300.

³Computer Engineering students can choose one out of MATH 5710 and STAT 3000.

⁴Courses that count for MATH 2270 and MATH 2280 can be combined to fulfill the credit for MATH 2250.
(MATH 2270 + MATH 2280 = MATH 2250).

⁵BE= Biological Engineering, CI = Civil Engineering, EN = Environmental Engineering,
CM = Computer Engineering, EL = Electrical Engineering, ME = Mechanical Engineering.

Your courses may transfer as listed. Additional classes may be acceptable for the professional program. Contact USU for more information.