

Required for USU Major						Articulation of Pre-engineering Courses between Westminster College and Utah State University current as of: 12/16/2015				
B	C	E	C	E	M	USU			Westminster	
I	I	N	O	L	E	Course	Cr	Course Title	Course	Cr
V	V	V	M	E	C					
E	L	R	P	C	H					
X						BENG 1880	3	Quantitative Biological Systems		
X						BENG 2330	3	Properties of Biomaterials		
X		X				BENG 2400	3	Biological Thermodynamics		
	X	X				BIOL 1010	3	Biology and the Citizen	BIOL 202	4
X						BIOL 1610	4	Biology I		
X						BIOL 3300	4	General Microbiology	BIOL 303	4
	X	X				CEE 1880	1	CEE Orientation & Computer Applications		
	X	X				CEE 2240	3	Engineering Surveying		
X	X	X				CEE 2870	2	Intro to Programming		
		X				CEE 2890	1	Sophomore Seminar - Environmental		
X	X	X			X	CHEM 1210 + 1215	4+1	Principles of Chemistry I + Lab I	CHEM 111	4
		X				CHEM 1220+1225	4+1	Principles of Chemistry II + Lab II	CHEM 112	4
X						CHEM 2300	3	Principles of Organic Chemistry	CHEM 303	4
X						CHEM 2315	1	Organic Chemistry Lab I	CHEM 303	-
X						CHEM 3700	3	Introduction to Biochemistry	CHEM 350	4
X						CHEM 3710	1	Introduction to Biochemistry Lab	CHEM 350	-
			X	X		X ² CS 1400	3	Intro to Computer Science - CS 1	CMPT 201 ¹	4
					X	CS 1405	1	Intro to Computer Science - CS 1 Lab	CMPT 201 ¹	-
			X	X		CS 1410	3	Intro to Computer Science - CS 2	CMPT 202 ¹	4
			X			CS 2420	3	Algorithms & Data Structures - CS 3	CMPT 306 ¹	4
			X			CS 3100	3	OS + Concurrency	CMPT 351	4
			X	X		ECE 2250	3	Electrical Circuits I		
			X	X		ECE 2290	3	Electrical Circuits II		
			X	X		ECE 2700	4	Digital Circuits		
X	X	X	X	X	X	ENGL 1010	3	Introduction to Writing	ENGL 110	3
X	X	X	X	X	X	ENGL 2010	3	Intermediate Writing		
X	X	X			X	ENGR 2010	3	Engineering Mechanics - Statics		
X	X	X			X	ENGR 2030	3	Engineering Mechanics - Dynamics		
	X				X	ENGR 2140	3	Strength of Materials		
X	X		X	X		ENGR 2450	3	Engineering Numerical Methods		
X	X				X	ENGR 2210	3	Fundamental Electronics		
X	X	X				ENGR 2270	2	Computer Engineering Drafting		
	X					GEO 1110/1115	3+1	Dynamic Earth		
					X	MAE 1200	2	Engineering Graphics		
					X	MAE 2160	3	Material Science		
					X	MAE 2165	1	Material Science Lab		
	X				X	MAE 2300	3	Thermodynamics I		
X	X	X	X	X	X	MATH 1210	4	Calculus I	MATH 201	4
X	X	X	X	X	X	MATH 1220	4	Calculus II	MATH 202 ¹	4
	X				X	MATH 2210	3	Multivariable Calculus	MATH 203 ¹	4
X	X	X			X	MATH 2250	4	Linear Algebra & Differential Equations	MATH 311+363	4+4
			X	X		MATH 2270	3	Linear Algebra	MATH 311	4
			X	X		MATH 2280	3	Ordinary Differential Equations	MATH 363	4
			X			MATH 3310	3	Discrete Mathematics	MATH 210	4
			X	X		MATH 5710	3	Introduction to Probability		
X	X	X	X	X	X	PHYS 2210 + 2215	4+1	General Physics - Science I	PHYS 211	4
			X	X	X	PHYS 2220 + 2225	4+1	General Physics - Science II	PHYS 212	4

¹Series should be completed at one school

²Mechanical Engineering requires C++. C or C# can be acceptable.