

Required for USU Major						Articulation of Pre-engineering Courses between Utah Valley University and Utah State University current as of: 12/16/2015				
B	I	E	C	E	M					
I	V	N	O	L	E					
E	N	V	M	E	C					
N	I	I	P	C	H					
L	R	R	T	T	H					

						USU		UVSC		
						Course	Cr	Course Title	Course	Cr
X						BENG 1880	3	Quantitative Biological Systems		
X						BENG 2330	3	Properties of Biomaterials		
X		X				BENG 2400	3	Biological Thermodynamics	ENGR 2300	3
	X	X				BIOL 1010	3	Biology and the Citizen	Biol 1010	3
X						BIOL 1610	4	Biology I	Biol 1610+1615	4+1
X						BIOL 3300	4	General Microbiology	Micr 3450+3455	3+1
	X	X				CEE 1880	1	CEE Orientation & Computer Applications		
	X	X				CEE 2240	3	Engineering Surveying	EGDT 1400	3
X	X	X				CEE 2870	2	Intro to Programming	CS 1400*	3
		X				CEE 2890	1	Sophomore Seminar - Environmental		
X	X	X			X	CHEM 1210+1215	4+1	Principles of Chemistry II + lab II	Chem 1210+1215	4+1
		X				CHEM 1220+1225	4+1	Principles of Chemistry II + Lab II	Chem 1220+1225	4+1
X						CHEM 2300	3	Principles of Organic Chemistry	Chem 2310	4
X						CHEM 2315	1	Organic Chemistry Lab I	Chem 2315	1
X						CHEM 3700	3	Introduction to Biochemistry	Chem 3600	3
X						CHEM 3710	1	Introduction to Biochemistry Lab	Chem 3605	1
			X	X	X ²	CS 1400	3	Intro to Computer Science - CS 1	CS 1400 ^{1,2}	3
					X	CS 1405	1	Intro to Computer Science - CS 1 Lab		
			X	X		CS 1410	3	Intro to Computer Science - CS 2	CS 1410 ¹	3
			X			CS 2420	3	Algorithms & Data Structures - CS 3	CS 2420	3
			X			CS 3100	3	OS + Concurrency	CS 3060	3
			X	X		ECE 2250	3	Electrical Circuits I	ECE 2250+2255	3+1
			X	X		ECE 2290	3	Electrical Circuits II		
			X	X		ECE 2700	4	Digital Circuits	ECE 2700+2705	3+1
X	X	X	X	X	X	ENGL 1010	3	Introduction to Writing	Engl 1010	3
X	X	X	X	X	X	ENGL 2010	3	Intermediate Writing	Engl 2020	3
X	X	X			X	ENGR 2010	3	Engineering Mechanics - Statics	Engr 2010	3
X	X	X			X	ENGR 2030	3	Engineering Mechanics - Dynamics	Engr 2030	3
	X				X	ENGR 2140	3	Strength of Materials	Engr 2140	3
X	X		X	X		ENGR 2450	3	Engineering Numerical Methods	Engr 2450*	3
X	X				X	ENGR 2210	3	Fundamental Electronics	ECE 2210+2215	3+1
X	X	X				ENGR 2270	2	Computer Engineering Drafting	EGDT 1040	3
	X					GEO 1110/1115	3+1	Dynamic Earth	GEO 1010+1015	3+1
					X	MAE 1200	2	Engineering Graphics	EGDT 2200	3
					X	MAE 2160	3	Material Science	ENGR 2160	3
					X	MAE 2165	1	Material Science Lab		
	X				X	MAE 2300	3	Thermodynamics I	ENGR 2300	3
X	X	X	X	X	X	MATH 1210	4	Calculus I	Math 1210	5
X	X	X	X	X	X	MATH 1220	4	Calculus II	Math 1220	5
	X			X	X	MATH 2210	3	Multivariable Calculus	Math 2210	3
X	X	X			X	MATH 2250	4	Linear Algebra & Differential Equations	Math 2270+2280	3+3
			X	X		MATH 2270	3	Linear Algebra	Math 2270	3
			X	X		MATH 2280	3	Ordinary Differential Equations	Math 2280	3
			X			MATH 3310	3	Discrete Mathematics	CS 2300	3
			X	X		MATH 5710	3	Introduction to Probability		
X	X	X	X	X	X	PHYS 2210 + 2215	4+1	General Physics - Science I	Phys 2210+2215	4+1
			X	X	X	PHYS 2220 + 2225	4+1	General Physics - Science II	Phys 2220+2225	4+1

¹Series should be completed at one school uvu.edu
²Mechanical Engineering requires C++. C or C# can be acceptable.