

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

						USU		BSU		
						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 320	3
	X	X				BIOL 1010	3	Biology and the Citizen	BIOL 100	4
X						BIOL 1610	4	Biology I	BIOL 191	4
X						BIOL 3300	4	General Microbiology	BIOL 303	5
	X	X				CEE 1880	1	CEE Orientation & Computer Applications	ENGR 120	3
	X	X				CEE 2240	3	Engineering Surveying	CE 210 + 211	2+1
X	X	X				CEE 2870	2	Intro to Programming	CS 115	2
		X				CEE 2890	1	Sophomore Seminar - Environmental		
X	X	X			X	CHEM 1210+1215	4+1	Principles of Chemistry I + Lab I	CHEM 111 +111L	3+1
		X				CHEM 1220+1225	4+1	Principles of Chemistry II + Lab II	CHEM 112 + 112L	3+1
X						CHEM 2300	3	Principles of Organic Chemistry	CHEM 307	3
X						CHEM 2315	1	Organic Chemistry Lab I	CHEM 308	2
X						CHEM 3700	3	Introduction to Biochemistry	CHEM 431	3
X						CHEM 3710	1	Introduction to Biochemistry Lab	CHEM 432	2
			X	X	X ²	CS 1400	3	Intro to Computer Science - CS 1	CS 121 ^{1,2}	3
					X	CS 1405	1	Intro to Computer Science - CS 1 Lab	CS 121L ¹	1
			X	X		CS 1410	3	Intro to Computer Science - CS 2	CS 221 ¹	3
			X			CS 2420	3	Algorithms & Data Structures - CS 3	CS 321 ¹	3
			X			CS 3100	3	OS + Concurrency	CS 453	3
			X	X		ECE 2250	3	Electrical Circuits I	ECE 210	3
			X	X		ECE 2290	3	Electrical Circuits II	ECE 212+212L	3+1
			X	X		ECE 2700	4	Digital Circuits	ECE 230 + 230L	3+1
X	X	X	X	X	X	ENGL 1010	3	Introduction to Writing	ENGL 101	3
X	X	X	X	X	X	ENGL 2010	3	Intermediate Writing	ENGL 102	3
X	X	X			X	ENGR 2010	3	Engineering Mechanics - Statics	ENGR 210	3
X	X	X			X	ENGR 2030	3	Engineering Mechanics - Dynamics	ENGR 220	3
	X				X	ENGR 2140	3	Strength of Materials	ENGR 350	3
X	X		X	X		ENGR 2450	3	Engineering Numerical Methods		
X	X				X	ENGR 2210	3	Fundamental Electronics	ENGR 240	3
X	X	X				ETE 2270	2	Computer Engineering Drafting	ME 105	3
	X					GEO 1110/1115	3+1	Dynamic Earth	GEOS 100	4
					X	MAE 1200	2	Engineering Graphics		
					X	MAE 2160	3	Material Science	ENGR 245	3
					X	MAE 2165	1	Material Science Lab	ENGR 245L	1
	X				X	MAE 2300 (was 2400)	3	Thermodynamics I	ENGR 320	3
X	X	X	X	X	X	MATH 1210	4	Calculus I	MATH 170	4
X	X	X	X	X	X	MATH 1220	4	Calculus II	MATH 175 ¹	4
	X			X	X	MATH 2210	3	Multivariable Calculus	MATH 275 ¹	4
X	X	X			X	MATH 2250	4	Linear Algebra & Differential Equations	MATH 333	4
			X	X		MATH 2270	3	Linear Algebra	MATH 301	3
			X	X		MATH 2280	3	Ordinary Differential Equations	MATH 433	3
			X			MATH 3310	3	Discrete Mathematics	MATH 387	4
			X	X		MATH 5710	3	Introduction to Probability	MATH 361	4
X	X	X	X	X	X	PHYS 2210 + 2215	4+1	General Physics - Science I	PHYS 211 + 211L	4+1
			X	X	X	PHYS 2220 + 2225	4+1	General Physics - Science II	PHYS 212 + 212L	4+1

¹Series should be completed at one school

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