

<b>Required for USU Major</b>						<b>Articulation of Pre-engineering Courses between Brigham Young University - Idaho and Utah State University current as of: 12/16/2015</b>				
<b>B</b>	<b>C</b>	<b>E</b>	<b>C</b>	<b>E</b>	<b>M</b>					
<b>I</b>	<b>I</b>	<b>N</b>	<b>O</b>	<b>L</b>	<b>E</b>					
<b>N</b>	<b>V</b>	<b>V</b>	<b>M</b>	<b>E</b>	<b>C</b>					
<b>L</b>	<b>I</b>	<b>I</b>	<b>P</b>	<b>C</b>	<b>H</b>					

						USU			BYU - I	
						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	ME 322	4
	X	X				BIOL 1010	3	Biology and the Citizen		
X						BIOL 1610	4	Biology I	BIO 180	4
X						BIOL 3300	4	General Microbiology	BIO 221+222	3+1
	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 105	4
		X				CHEM 1220+1225	4+1	Principles of Chemistry II + Lab II	CHEM 106	4
X						CHEM 2300	3	Principles of Organic Chemistry	CHEM 351	4
X						CHEM 2315	1	Organic Chemistry Lab I	CHEM 351	4
X						CHEM 3700	3	Introduction to Biochemistry		
X						CHEM 3710	1	Introduction to Biochemistry Lab		
			X	X	X <sup>2</sup>	CS 1400	3	Intro to Computer Science - CS 1	CS 124 <sup>1,2</sup>	3
					X	CS 1405	1	Intro to Computer Science - CS 1 Lab		
			X	X		CS 1410	3	Intro to Computer Science - CS 2	CS 165 <sup>1</sup>	3
			X			CS 2420	3	Algorithms & Data Structures - CS 3	CS 235 <sup>1</sup>	3
			X			CS 3100	3	OS + Concurrency	CS 345	3
			X	X		ECE 2250	3	Electrical Circuits I	ECEN 150	3
			X	X		ECE 2290	3	Electrical Circuits II	ECEN 250	4
			X	X		ECE 2700	4	Digital Circuits	ECEN 160	3
X	X	X	X	X	X	ENGL 1010	3	Introduction to Writing	FDENG 101	3
X	X	X	X	X	X	ENGL 2010	3	Intermediate Writing	FDENG 301	3
X	X	X			X	ENGR 2010	3	Engineering Mechanics - Statics		
X	X	X			X	ENGR 2030	3	Engineering Mechanics - Dynamics	ME 204	3
	X				X	ENGR 2140	3	Strength of Materials	ME 202	3
X	X		X	X		ENGR 2450	3	Engineering Numerical Methods		
X	X				X	ENGR 2210	3	Fundamental Electronics		
X	X	X				ETE 2270	2	Computer Engineering Drafting	ME 172	3
	X					GEO 1110/1115	3+1	Dynamic Earth	Geol 111+ 111L	3+1
					X	MAE 1200	2	Engineering Graphics		
					X	MAE 2160	3	Material Science	ME 250	3
					X	MAE 2165	1	Material Science Lab	ME 250L	1
	X				X	MAE 2300	3	Thermodynamics I	ME 322	4
X	X	X	X	X	X	MATH 1210	4	Calculus I	FDMAT 112**	4
X	X	X	X	X	X	MATH 1220	4	Calculus II	Math 113 <sup>1</sup>	3
	X			X	X	MATH 2210	3	Multivariable Calculus	Math 215 <sup>1</sup>	4
X	X	X			X	MATH 2250	4	Linear Algebra & Differential Equations	Math 316	4
			X	X		MATH 2270	3	Linear Algebra	Math 341	3
			X	X		MATH 2280	3	Ordinary Differential Equations		
			X			MATH 3310	3	Discrete Mathematics	CS 238	4
			X	X		MATH 5710	3	Introduction to Probability		
X	X	X	X	X	X	PHYS 2210 + 2215	4+1	General Physics - Science I	Ph 121+150	3+1
			X	X	X	PHYS 2220 + 2225	4+1	General Physics - Science II	Ph 123+220+250	3+3+1

<sup>1</sup>Series should be completed at one school byui.edu  
<sup>2</sup>Mechanical Engineering requires C++. C or C# can be acceptable.