

Required for USU Major						Articulation of Pre-engineering Courses between Southwestern Indian Polytechnic Institute and Utah State University current as of: 10/1/2014				
B	C	E	C	E	M	USU				
I	I	N	O	L	E	Course	Cr	Course Title	Course	Cr
V	V	V	M	E	C					
E	I	I	P	C	H					
N	L	R	T							
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		
X						BIOL 1610	4	Biology I		
X						BIOL 3300	4	General Microbiology		
	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 121 + 121L	3+1
		X				CHEM 1220+1225	4+1	Principles of Chemistry II + Lab II		
X						CHEM 2300	3	Principles of Organic Chemistry	Chem 212	4
X						CHEM 2315	1	Organic Chemistry Lab I		
X						CHEM 3700	3	Introduction to Biochemistry		
X						CHEM 3710	1	Introduction to Biochemistry Lab		
			X	X	X ²	CS 1400	3	Intro to Computer Science - CS 1		
					X	CS 1405	1	Intro to Computer Science - CS 1 Lab		
			X	X		CS 1410	3	Intro to Computer Science - CS 2		
			X			CS 2420	3	Algorithms & Data Structures - CS 3		
			X			CS 3100	3	OS + Concurrency		
			X	X		ECE 2250	3	Electrical Circuits I	ENGR 211+211L	3+1
			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		
X	X	X	X	X	X	ENGL 2010	3	Intermediate Writing		
X	X	X			X	ENGR 2010	3	Engineering Mechanics - Statics	ENGR 205	3
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	ENGR 102	3
	X					GEO 1110/1115	3+1	Dynamic Earth	Geol 101+101L	3+1
					X	MAE 1200	2	Engineering Graphics		
	X				X	MAE 2160	3	Material Science		
	X				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 162	4
X	X	X	X	X	X	MATH 1220	4	Calculus II		
	X				X	MATH 2210	3	Multivariable Calculus		
X	X	X			X	MATH 2250	4	Linear Algebra & Differential Equations		
			X	X		MATH 2270	3	Linear Algebra		
			X	X		MATH 2280	3	Ordinary Differential Equations		
			X			MATH 3310	3	Discrete Mathematics		
			X	X		MATH 5710	3	Introduction to Probability		
X	X	X	X	X	X	PHYS 2210 + 2215	4+1	General Physics - Science I	Phys 160+160L	3+1
			X	X	X	PHYS 2220 + 2225	4+1	General Physics - Science II		

¹Series should be completed at one school

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