

B.S. in Engineering 2021-22

	Course	Title	Cr.	When	Prerequisites	
	Quantitative Lit.	MATH 1210 - Calculus I	4	F/S/SU	MATH 1050 & 1060 or ALEKS 75	
	PS GE	CHEM 1210/15	4/1	F/Su	MATH 1050 or 1210 or ACT 26+	
Other GE courses are required to graduate with a Bachelor's Degree from SUU.						
Other GE Courses are required to graduate with a Bachelor's Degree from SUU. The above-listed courses count for both GE and major requirements.						
	CHEM 1210/15	Principles of Chemistry	4/1	F/S/Su	MATH 1050 or higher, ACT 26	
	EE 2250/55	Electric Circuits/Lab	3/1	F/S/Su	MATH 2250*, PHYS 2220/25	
	ENGR 1000	Engineering Success Skills	1	F/S		
	ENGR 1050	Intro to Engineering Design	1	F/S/Su	MATH 1010 or higher	
	ENGR 2010	Statics	3	F/S/Su	MATH 1210	
	ENGR 2140/45	Strength of Materials/Lab	3/1	F/S/Su	ENGR 2010, MATH 1220, ENGL 2010	
	ENGR 3030	Technical Project Management	3	S	ENGR 1010 or ENGR 2145	
	ENGR 4025	Engineering Capstone I	3	F	ENGR 3030	
	ENGR 4085	Engineering Capstone II	3	S	ENGR 4025	
	MATH 1040	Statistical Inference	4	F/S/Su	MATH 1010, ALEKS 50, ACT 23	
	MATH 1210	Calculus I	4	F/S/Su	MATH 1050, 1060, ALEKS 75 ACT 26	
	MATH 1220	Calculus II	4	F/S/Su	MATH 1210	
	MATH 2250	Linear Algebra & Differential Equations	4	F/S	MATH 1220	
	ME 2030	Dynamics	3	F/S/Su	ENGR 2010, PHYS 2210	
	ME 3200	Thermodynamics	3	F	PHYS 2220	
	ME 3300/05	Fluid Mechanics/Lab	3/1	S/Su	MATH 1220, PHYS 2210	
	PHYS 2210/15	Physics for Scientists & Engineers I	4/1	F/S/Su	MATH 1210	
	PHYS 2220/25	Physics for Scientists & Engineers II	4/1	F/S/Su	PHYS 2210/15, MATH 1220	
Choose One	COMM 4240	Technical Writing	3	F/S/Su		
	ENGL 3120	Grant & Technical Writing		S	ENGL 2010	
Civil Engineering Concentration	CCET 1040	Intro to Residential Arch-AutoCAD	3	F/S		
	CCET 3670	Civil Design	3	S	CCET 1010 or CCET 1040	
	CE 4100	Design of Reinforced Concrete Structures	3	S-odd	ENGR 4050	
	ENGR 4050	Structural Analysis	3	F	ENGR 2140/45	
	GEPG 3550/55	Principles of GIS/Lab	3/2	F		
	Construction Management Electives - Select 1					
	CM 2040	Construction Materials & Testing	3	S		
	CM 3240	Estimating and Bidding	3	F	CSIS-1000	
	CM 3880	Planning & Scheduling	3	S	CM 1000, 2030	
	CM 4550	Construction Safety	3	F/S	CM 3270	
	Engineering Electives - Choose 9 credits					
	EE 4030/35	Electronics/Lab	3/1	F/Su	EE 2250/55	
	ENGR 4900	Special Topics	1-3			
	ME 2130	Manufacturing	2	S	ENGR 1030	
	ME 3100	Material Science	3	F	CHEM 1210/15, MATH 1210	
	ME 3120	Machine Design	3	F	ENGR 1030, 2140, ME 2030, 3100	
	ME 3320/25	Mechatronics/Lab	3/1	S	EE 4030, ME 2030	
	ME 4100/05	Instrumentation & Measurements/Lab	3/1	S	EE 2250, ENGR 2140, ME 2030, ME 3200	
	ME 4200/05	Heat Transfer/Lab	3/1	F	MATH 2250, ME 3300/05	
	ME 4300	Vibrations	3	F	ENGR 2140, 2170, ME 2030, MATH 2250	
Electrical Concentration	EE 4030/35	Electronics/Lab	3/1	F/Su	EE 2250/55	
	EE 4600	Electromagnetics	3	S	PHYS 2220, MATH 2210, 2250, EE 2250, ENGR 2170	
	ENGR 1030	Computer-Aided Design - SolidWorks	3	F/S/Su		
	ENGR 2170	Programming for Engineers	3	F/S/Su	MATH 1210	
	MATH 2210	Calculus III	4	F/S/Su	MATH 1220	
	ME 2130	Manufacturing	2	S	ENGR 1030	
	ME 3100	Material Science	3	F	CHEM 1210/15 & MATH 1210	
	ME 3320/25	Mechatronics/Lab	3/1	S	EE 4030/35 & ME 2030	
	Free Elective	3				

* May be taken concurrently

Credits to total 120 and 40 Upper Division