Sustainable Systems Engineering (SSE) B.S. Minimum 128 credits

Minor (NOT required)

This is not an official list of degree requirements. Adjustments may be required due to curriculum changes. Starting Fall 2023. Recommendation only.

First Year		
Fall	SSE 1040 Life Cycle and Systems Engineering-An Introduction	3
	SSE 1215 Engineering Graphics-Solid Modeling	3
	MTH 1410 Calculus I	4
	CHE 1100 Principles of Chemistry **AND** CHE 1150 Laboratory	5
	Written Communication	3
	Total Credits	**18**
Spring	SSE 2000 Engineering Safety and Quality Assurance	3
	SSE 2100 Basic Electronic Systems	3
	PHY 2311 General Physics I **AND** PHY 2321 Laboratory	5
	MTH 2410 Calculus II	4
	Written Communication	3
	Total Credits	**18**

Second Year		
Fall	SSE 2200 Materials Science	3
	MTH 2420 Calculus III	4
	SSE 2150 Mechanics of Statics Systems	3
	Oral Communication	3
	Arts and Humanities (GD or ESSJ)*	3
	Total Credits	**16**
Spring	SSE 2350 Engineering Programming	3
	SSE 3135 Strength of Materials with Laboratory	4
	SSE 3160 Mechanics of Dynamics Systems	3
	MTH 3420 Differential Equations	4
	Historical (GD or ESSJ)*	3
	Total Credits	**17**

Third Year		
Fall	SSE 3185 Fundamental Fluid Mechanics with Laboratory	4
	Social Behavioral Sciences (GD or ESSJ)*	3
	Arts and Humanities (GD or ESSJ)*	3
	PHY 2331 General Physics II **AND** PHY 2341 Laboratory	5
	Total Credits	**15**
Spring	SSE 3000 Fundamental of Systems Design	3
	SSE 3070 Machine Elements and Mechanical Systems	3
	CET 3120 Engineering Economy (Recommended SBS)	3
	EVE 3200 Environmental Sustainability in Urban Context	3
	SSE 3300 Thermodynamics and Heat Transfer	3
	Total Credits	**15**

Fourth Year		
Fall	MTH 3210 Probability and Statistics	4
	SSE 3730 Control Systems	2
	SSE 4160 Geotechnical Engineering with Laboratory	4
	SSE 4000 Sustainable Systems Engineering	3
	SSE 4280 Energy and Power	3
	Total Credits	**16**
Spring	SSE 4200 Sustainable Development Strategy	3
	SSE 4610 Capstone: Senior Design Project	3
	Approved Elective	4
	Approved Elective	3
	Total Credits	**13**

*GD = global diversity class *ESSJ = ethnic studies and social justice class

SSE Approved Electives: SSE 3100, SSE 3175, SSE 3500, SSE 4300, SSE 4500, SSE 4700, ENV 4200, MKT 3000, or PSC 3020