



METROPOLITAN STATE UNIVERSITYSM
OF DENVER

College of Professional Studies

Sustainable Systems Engineering, B.S.

Minor (not required)

Fall 2020 Catalog Year

First Year		
Fall: 16 Credits	SSE 1040 (3) Life Cycle and Systems Engineering: An Intro	
	Arts & Humanities (3)	
	MTH 1410 (4) Calculus I	
	Oral Communication (3)	
	Written Communication (3)	
Spring: 15 Credits	SSE 1215 (3) Engineering Graphics: Solid Modeling	
	CHE 1100 (4) Principles Chemistry AND	
	CHE 1150 (1) Principles of Chemistry Laboratory	
	MTH 2410 (4) Calculus II	
	Written Communication (3)	

Third Year		
Fall: 17 Credits	SSE 2100 (3) Basic Electronic Systems	
	SSE 2200 (3) Materials Science	
	SSE 3100 (1) Mathematical Modeling	
	SSE 3135 (4) Strength of Materials with Laboratory	
	SSE 3160 (3) Mechanics of Dynamic Systems	
	Arts & Humanities (3)	
Spring: 15 Credits	SSE 2350 (3) Engineering Programming	
	SSE 3000 (3) Applied Systems Design	
	SSE 3175 (3) Modeling Structural Systems	
	SSE 3185 (3) Fundamental Fluid Mechanics	
	SSE 3300 (3) Thermodynamics and Heat Transfer	

Second Year		
Fall: 18 Credits	SSE 2000 (3) Engineering Safety and Quality Assurance	
	Historical (3) GD or MC recommended	
	MTH 2420 (4) Calculus III	
	PHY 2311 (4) General Physics I AND	
	PHY 2321 (1) General Physics I Laboratory	
	Social and Behavioral Sciences (3) GD or MC Recommended	
Spring: 15 Credits	SSE 2150 (3) Mechanics of Static Systems	
	CET 3120 (3) Engineering Economy	
	MTH 3420 (4) Differential Equations	
	PHY 2331 (4) General Physics II AND	
	PHY 2341 (1) General Physics II Laboratory	

Fourth Year		
Fall: 17 Credits	SSE 3070 (3) Machine Element and Mechanical Systems	
	SSE 3730 (2) Control Systems	
	SSE 4000 (3) Sustainable Systems Engineering	
	SSE 4160 (3) Geotechnical Engineering	
	ECO 3800 (3) Development Economics	
	Social & Behavioral Sciences (3)	
Spring: 15 Credits	SSE 4200 (3) Sustainable Development Strategy	
	SSE 4280 (3) Energy and Power	
	SSE 4300 (3) Probabilistic Design Methodology	
	SSE 4610 (3) Capstone: Thesis in Sustainable Development	
	Elective (3) must select one: SSE 3500, SSE 4500, SSE 4700, MKT 3000, PSC 3020, or ENV 4200	