



METROPOLITAN STATE UNIVERSITYSM
OF DENVER
College of Professional Studies

Sustainable Systems Engineering, B.S.

Minor (not required)

Fall 2019 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) | |
| | ENG1010 Composing Arguments (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 | |
| | ENG1020 Research & Argument Writing (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 Science II (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 I (3) MC recommended | |
| 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. | |