

**NOTE:** This document can be used as a compact display of courses and other curricular requirements at the time of publication of the 2019-2020 catalog. The Degree Progress Report must be used to track students' progress in all degree requirements, throughout their Cal Poly

**Note:** No major or support courses may be selected as credit/no credit.

<b>MAJOR COURSES (86)</b>	<i>Units</i>
CE 113 Computer Aided Drafting	2
CE 204 Mechanics of Materials I	3
CE 207 Mechanics of Materials II	2
CE 251 Program App in Engineering	2
CE 336 Water Resources Engineering	4
CE 337 Hydraulics Laboratory	1
CE 381 Geotechnical Engineering	4
CE 434 Groundwater Hydraulics and Hydrology	4
CE 465 CE Professional Practice	1
ENVE 111 Intro to Env. Engr Profession	1
ENVE 264 Environmental Fluid Mechanics	4
ENVE 304 Process Thermodynamics	3
ENVE 309 Noise and Vibration Control	3
ENVE 325 Air Quality Engineering	4
ENVE 331 Fundamentals of Environmental Engr	4
ENVE 421 Mass Transfer Operations	4
ENVE 426 Air Quality Measurements	3
ENVE 434 Water Chem/ Quality Measurements	4
ENVE 438 Water/Wastewater Treat Design	3
ENVE 450 Industrial Pollution Prevention	4
ENVE 466 Senior Project Design Lab I	2
ENVE 467 Senior Project Design Lab II	2
Select from the following: ENVE 411, 436, 439, 443, 455, 480	12
Technical Electives <sup>1,2</sup> <i>(In consultation with faculty advisor. See list and guidelines on reverse.)</i>	10

**SUPPORT COURSES (64-65)**

CHEM 124 General Chemistry for Engr I (B3/B4) <sup>3</sup>	4
CHEM 125 General Chemistry for Engr II	4
CHEM 126 General Chemistry for Engr III	4
CHEM 312 Srvy Org Chem (trans equiv CHEM 212)	5
ENGL 149 Technical Writing for Engineers (A3) <sup>3</sup>	4
MATH 141 Calculus I (B1) <sup>3</sup>	4
MATH 142 Calculus II (B1) <sup>3</sup>	4
MATH 143 Calculus III (Add'l Area B) <sup>3</sup>	4
MATH 241 Calculus IV	4
MATH 244 Linear Analysis I	4
MCRO 221 (B2) <sup>3</sup> or MCRO 224 (B2) <sup>3</sup>	4-5
ME 211 Engineering Statics	3
PHYS 141 General Physics IA (Add'l Area B) <sup>3</sup>	4
PHYS 132 General Physics II	4
PHYS 133 General Physics III	4
STAT 312 Statistical Methods for Engineers (B6) <sup>3</sup>	4

**GENERAL EDUCATION (GE)**

**40**

72 units required, 32 of which are specified in Major/Support

Refer to current schedule or <http://www.ge.calpoly.edu> to choose GE courses. You will not receive credit for courses not on the approved lists.

**Minimum of 8 units required at the 300 level.**

**Area A Communication**

**8**

- A1 Expository Writing ..... 4
- A2 Oral Communication ..... 4
- A3 Reasoning, Argu & Writing (4 units in Support) <sup>3</sup>

**Area B Math, Science, & Quantitative Reasoning**

28 units are listed in Support <sup>3</sup>

**Area C Arts and Humanities**

**16**

- C1 Literature ..... 4
- C2 Philosophy ..... 4
- C3 Fine/Performing Arts ..... 4
- C4 Upper-division elective <sup>4</sup> ..... 4

**Area D Society and the Individual**

**12**

- D1 The American Exp (40404) ..... 4
- D2 Political Economy ..... 4
- D3 Comp Social Institutions ..... 4

**Area E Lifelong Learning and Self-Development**

**4**

*(formerly Area D4)*

**FREE ELECTIVES ..... 0**

<sup>1</sup> To be selected in consultation with your academic advisor.

<sup>2</sup> A student may petition to take a course not included in the list of electives and receive major technical elective credit, but they must first obtain approval from a faculty advisor, before taking the course

<sup>3</sup> Required in Support; also satisfies GE.

<sup>4</sup> PHIL 340 or ES/NR 360 recommended.

**OTHER DEGREE REQUIREMENTS:**

- Cal Poly, Higher Ed, and Major GPA must all be at least 2.00
- For students admitted Fall 2016 and after, a grade of C- or higher is required in GE A1, A2, A3, and one GE B1 course

**All students must complete:**

- United States Cultural Pluralism Requirement
- Graduation Writing Requirement
- 60 units Upper Division (any 300-400 level classes)
- Upper Division units in the Major: 27
- Residency Requirements: See Degree Progress Report for details

## TECHNICAL ELECTIVES

Technical Electives may be chosen from any 300-500 level CE/ENVE courses not taken to satisfy other curriculum requirements, with the following exceptions: senior project, co-op, graduate seminar, comprehensive exam, and thesis; and ENVE 324, 323, 570, 571

Technical Electives cannot be used to satisfy other major, support, or general education requirements. No double counting is allowed.

- 1) No more than 4 units in total from CE/ENVE 400, 500, ENVE 405, 407, and 471 combined can be counted towards technical electives.
- 2) No more than 4 units of coursework other than CE/ENVE may be used to satisfy the ENVE Engineering technical elective degree requirement.

Air Quality and Climate:

ERSC/GEOG 414; PHYS 313

Appropriate Technology:

PSC/UNIV 492

Biology/Biochemistry/Microbiology:

BIO 363; ENGR/ENVE 581; MCRO 342; MSCI 307

Computer Applications and Computations:

LA/NR 317; STAT 313, 323

Chemistry:

Chem 313, 341

Energy:

BRAE 448; PHYS 310

Hydrology and Soils:

BRAE 532

Law and Policy:

CRP/NR 404, 408; IME 314 *or* IME 315