

**BS INDUSTRIAL ENGINEERING**

2020-2021

updated  
1.11.20

Units Required 190

NAME \_\_\_\_\_  
STUDENT ID \_\_\_\_\_  
MINOR \_\_\_\_\_



**CAL POLY**

Cal Poly, Higher Ed, and Major GPA at least 2.00 [ ] YES [ ] NO  
 US Cultural Pluralism Met [ ] YES [ ] NO  
 60 Units Upper Division Met Taken/Remaining [ ] YES [ ] NO  
 GWR Met [ ] YES [ ] NO  
 Upper Div GE Met Taken/Remaining [ ] YES [ ] NO  
 Free Electives Met [ ] YES [ ] NO  
 C- or higher in A1, A2, A3, and B4 [ ] YES [ ] NO  
 Residency Requirements Met [ ] YES [ ] NO

**NOTE:** This is a snapshot of the curriculum as originally published in the catalog. The Degree Progress Report (DPR) reflects updates to the published catalog. The DPR will be used to award your degree and calculate your EAP.

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

MAJOR COURSES (82)	Units	Grade	Grd Pts
IME 101 Intro to Industr & Mfg Engineering	1		
IME 141 Manufacturing Processes: Net Shape	1		
IME 144 Intro to Design & Mfg	4		
IME 156 Basic Electronics Manufacturing	2		
IME 212 Intro. To Enterprise Analytics	4		
IME 223 Process Improvement Fundamentals	4		
IME 301 Operations Research I	4		
IME 305 Operations Research II	4		
IME 312 Data Management & System Design	4		
IME 315 Financial Decision Making for Eng.	3		
IME 319 Human Factors Engineering	3		
IME 326 Engineering Test Design & Analysis	4		
IME 372 Applications of Enterprise Analytics	4		
IME 410 Production Planning & Control Sys	4		
IME 417 Supply Chain & Logistics Management	4		
IME 420 Simulation	4		
IME 429 Ergonomics Laboratory	1		
IME 430 Quality Engineering	4		
IME 443 Facilities Planning and Design	4		
IME 481 Senior Design Project I <sup>5,6</sup>	2		
IME 482 Senior Design Project II <sup>5,6</sup>	2		
IME 483 Senior Design Project III <sup>5,6</sup>	2		
Technical Electives <sup>2,3</sup> (Select from list on reverse)	13		

**GENERAL EDUCATION (GE)**

**36**

72 units required, 36 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 English Language Comm and Critical Thinking**

**8**

A1 Oral Communication	4
A2 Written Communication	4
A3 Critical Thinking	

**Area B Scientific Inquiry & Quantitative Reasoning**

28 units are listed in Support<sup>1</sup>

**Area C Arts and Humanities**

**16**

Lower-division courses in Area C must come from three different subject prefixes

C1 Arts <sup>8</sup>	4
C2 Humanities <sup>8</sup>	4
Lower-Division C Elective: C1 or C2 <sup>8</sup>	4
Upper-Division C	4

**Area D Social Sciences**

**12**

D1 American Institutions (Title 5, Sec. 40404)	4
D2 Lower-Division D	4
Area D Elective: Select either an additional lower-division D2 or an upper-division D course	4

**Area E Lifelong Learning and Self-Dev (4 units in Support)<sup>1</sup>**

Lower-Division E	
------------------	--

**FREE ELECTIVES**

**0**

**SUPPORT COURSES (72)**

Select from the following <sup>7</sup> : CE 204, EE 321, ME 212	6
BIO 213 <i>and</i> BMED 213 (B2) <sup>1</sup>	2
CHEM 124 General Chem for Phy Sci & Eng I (B1/B3) <sup>1</sup>	4
CSC 232 Computer Programming for Scientists & Engineers	3
EE 201 Electric Circuit Theory	3
EE 251 Electric Circuits Laboratory	1
ENGL 149 Technical Writing for Engineers (A3) <sup>1</sup>	4
MATE 210 Materials Engineering <i>and</i> MATE 215 Materials Laboratory I	3
MATH 141 Calculus I (B4) <sup>1</sup>	4
MATH 142 Calculus II (B4) <sup>1</sup>	4
MATH 143 Calculus III (Add'l Area B) <sup>1</sup>	4
MATH 241 Calculus IV	4
MATH 244 Linear Analysis I	4
ME 211 Engineering Statics	3
PHYS 141 General Physics IA (Add'l Area B) <sup>1</sup>	4
PHYS 132 General Physics II	4
PHYS 133 General Physics III	4
PSY 201 General Psv. or PSY 202 General Psychology (E) <sup>1</sup>	4
STAT 321 Probability and Stats for Engineers & Scientists (UD-B) <sup>1</sup>	4

<sup>1</sup> Required in Support; also satisfies GE

<sup>2</sup> Courses meeting technical electives may not be used to satisfy other major, support, or general education requirements (no double counting of coursework).

<sup>3</sup> Consultation with advisor is recommended prior to selecting technical electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals. Upper division courses not on this list may substitute as technical electives if approved by advisor and IME department chair.

<sup>4</sup> IME 400 requires a special problems form and no more than 4 total units are allowed.

<sup>5</sup> ENGR 459, ENGR 460, and ENGR 461 (6) may substitute for IME 481, IME 482, IME 483 (6).

<sup>6</sup> ENGR 463, ENGR 464, ENGR 465 (6) may substitute for IME 481, IME 482, and IME 483 (6).

<sup>7</sup> No course credits may be used simultaneously to satisfy both engineering and technical elective requirements.

<sup>8</sup> C1, C2, and C elective must come from three different subject prefixes.

**TECHNICAL ELECTIVES<sup>2,3,7</sup>**

Select from Category A (8-13 units) & Category B (0-5 units) below:

## Category A (8-13 units)

EE 321, 361, 434;

IME 303, 335, 336, 356, 400<sup>4</sup>, 408, 409, 416, 418, 424, 428, 432,  
435, 451, 457, 458, 470, 471, 510, 511, 520, 527, 541, 542, 543  
544, 545;

MATE 410;

ME 302, 305, 341

## Category B (0-5 units)

AG/ISLA/EDES/ENGR/SCM/UNIV 350;

BUS/ENGR 310;

BUS 311, 346, 382, 402;

CE 204, 207;

IME 401, 421, 441, 460;

MATH 344, 350;

ME 212;

PSY 350;

STAT 324, 330, 331, 416