

BS MANUFACTURING ENGINEERING

2020-2021

updated
1.11.20

Units Required 192

NAME _____

STUDENT ID _____

MINOR _____

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



CAL POLY

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 (74)	Units	Grade	Grd Pts
IME 101 Intro to Industr & Mfg Engineering	1		
IME 140 Graphics Communication & Modeling	2		
IME 141 Manufacturing Processes: Net Shape	1		
IME 142 Mfg Processes: Materials Joining	2		
IME 144 Intro to Design & Mfg	4		
IME 156 Basic Electronics Mfg	2		
IME 223 Process Improvement Fundamentals	4		
IME 314 Engineering Economics <i>or</i> IME 315 Financial Decision Making for Eng.	3		
IME 327 Test Design & Analysis	4		
IME 330 Fundamentals of Mfg Engr	4		
IME 335 Computer-Aided Manufacturing I	4		
IME 342 Manufacturing Systems Integration	4		
IME 356 Manufacturing Automation	4		
IME 417 Supply Chain & Logistics Management	4		
IME 418 Product-Process Design	4		
IME 430 Quality Engineering	4		
IME 450 Manufacturing Process & Tool Engr	4		
IME 481 Senior Design Project I ^{4,5}	2		
IME 482 Senior Design Project II ^{4,5}	2		
IME 483 Senior Design Project III ^{4,5}	2		
Technical Electives ^{2,3} (see list on reverse)	13		

SUPPORT COURSES (78)

BIO 213 <i>and</i> BMED 213 (B2) ¹	2
CE 204 Mechanics of Materials I ⁶	3
CHEM 124 General Chem for Engineering I (B1/B3) ¹	4
CHEM 125 General Chem for Engineering II	4
CSC 232 Computer Programming for Scientists & Engineers	3
EE 201 Electric Circuit Theory	3
EE 251 Electric Circuits Laboratory	1
EE 321 Electronics	3
ENGL 149 Technical Writing for Engineers (A3) ¹	4
MATE 210 Materials Engineering	3
MATE 215 Materials Laboratory I	1
MATH 141 Calculus I (B4) ¹	4
MATH 142 Calculus II (B4) ¹	4
MATH 143 Calculus III (Add'l Area B) ¹	4
MATH 241 Calculus IV	4
MATH 244 Linear Analysis I	4
ME 211 Engineering Statics	3
ME 212 Engineering Dynamics	3
ME 302 Thermodynamics I	3
PHYS 141 General Physics IA (Add'l Area B) ¹	4
PHYS 132 General Physics II	4
PHYS 133 General Physics III	4
STAT 321 Probability and Stats for Engineers & Scientists (UD-B) ¹	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 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 Support¹

Area C Arts and Humanities

16

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

C1 Arts ⁷	4
C2 Humanities ⁷	4
Lower-Division C Elective: C1 or C2 ⁷	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-Development

4

Lower-Division E	4
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FREE ELECTIVES **0**

¹ Required in Support; also satisfies GE

² The courses selected to satisfy this requirement may not be used to satisfy other major, support, or general education requirements (no double counting of coursework).

³ Students may take 300 level and above courses not in the list subject to the approval by advisor and IME department chair. Consultation which advisor is recommended prior to selecting technical electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals.

⁴ ENGR 459, ENGR 460 and ENGR 461 (6) may substitute for IME 481, IME 482 and IME 483 (6).

⁵ ENGR 463, ENGR 464 and ENGR 465 (6) may substitute for IME 481, IME 482 and IME 483 (6).

⁶ CE 208 (5) may substitute for both CE 204 (3) and CE 207 (2).

⁷ C1, C2, and C elective must come from three different subject prefixes.

TECHNICAL ELECTIVES^{2,3,4,5}

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

Category A

BMED 410;

EE 361, 434;

IME 301, 303, 305, 312, 319, 336, 400, 408, 409, 410, 416,

420, 424, 428, 429, 432, 435, 443, 451, 457, 470, 471, 510,

511, 520, 527, 541, 542, 543, 544, 545;

MATE 410, 430, 440, 445;

ME 305, 341, 415

IME/MATE 458/CPE 488

Category B

BMED 212;

BUS 311, 346, 382, 402;

CE 207⁶;

ENGR 350;

IME 401, 421, 441, 460;

ITP 326, 330, 341, 371, 406, 428;

MATH 344, 350

BUS/ENGR 310