BS INDUSTRIAL ENGINEERING

2015-2017 *updated 10.04.16* **Units Required 190**

NOTE: This document can be used as a compact display of courses and other curricular requirements at the time of publication of the 2015-2017 catalog. The Degree Progress Report must be used to track students' progress in all degree requirements, throughout their Cal Poly career.

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

MAJOR COURSES (79)	*Units*
IME 101 Intro to Industr & Mfg Engineering	1
IME 140 Graphics Communication & Modeling	2
IME 141 Manufacturing Processes: Net Shape	1
IME 144 Intro to Design & Mfg	4
IME 156 Basic Electronics Manufacturing	2
IME 223 Process Improvement Fundamentals	4
IME 239 Industrial Costs & Controls	3
IME 301 Operations Research I	4
IME 303 Project Organization & Management	4
IME 305 Operations Research II	4
IME 312 Data Management & System Design	4
IME 314 Engineering Economics	3
IME 319 Human Factors Engineering	3
IME 326 Engineering Test Design & Analysis	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 Project Design Laboratory I	2
IME 482 Senior Project Design Laboratory II	3
Technical Electives [2,3,4,5] *(Select from list on reverse)*	10

SUPPORT COURSES (75)

BIO 213 ***and***	2
BMED 213 (B2)[1]	2
CE 204 Mechanics of Materials I	3
CHEM 124 General Chem for Phy Sci & Eng I (B3/B4)[1]	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 ***and***	3
MATE 215 Materials Laboratory I	1
MATH 141 Calculus I (B1)[1]	4
MATH 142 Calculus II (B1)[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
PHYS 141 General Physics IA (Add'l Area B)[1]	4
PHYS 132 General Physics II	4
PHYS 133 General Physics III	4
PSY 201/202 General Psychology (D4)[1]	4
STAT 321 Probability and Stats for Engineers & Scientists (B6)[1]	4

GENERAL EDUCATION (GE) **36**

72 units required, *36 of which are specified in Support*

Refer to current schedule or http://www.ge.calpoly.edu to choose GE courses.

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)[1]	
Area B Science and Mathematics (no add'l units req'd)		
28 units are listed in Support		
Area C Arts and Humanities		**16**
C1	Literature	4
C2	Philosophy	4
C3	Fine/Performing Arts	4
C4	Upper-division elective	4
Area D/E Society and the Individual		**12**
D1	The American Exp (40404)	4
D2	Political Economy	4
D3	Comp Social Institutions	4
D4	Self Dev (CSU Area E) (4 units in Support) [1]	

FREE ELECTIVES **0**

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[2,3,4,5]

AG/ISLA/EDES/ENGR/SCM/UNIV 350;
BUS 310, 311, 346, 382, 402, 404, 488;
CE 207;
EE 361, 434;
IME 142, 335, 351, 356, 400[6], 401, 408, 409, 416, 418, 427, 428, 435, 441, 442, 457, 458, 470, 471, 500[6], 541, 542, 543, IME/AERO 510, 511;
IT 341, 406, 428;
ME 302, 305, 341;
MATE 410;
MATH 344, 350;
PSY 350;
STAT 324, 330, 331, 416

[1] Required in Support; also satisfies GE

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

[3] At least 6 units of technical electives must be upper division (300-level or above) engineering or computer science courses.

[4] A maximum of 4 units of technical electives may be upper division (300-level or above) courses from outside of the College of Engineering or lower division (100 or 200 level) engineering or computer science courses.

[5] 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.

[6] IME 400 and IME 500 require a special problems form and no more than 4 total units are allowed.