

Total Units: _____ **Over 18 units is an overload. Are you overloaded? Yes** **No**

Notes: _____

Advisor Signature: _____ Date: _____

Student Signature: _____ Date: _____

2021-2022 Catalog for Industrial Engineering

Course Number		Title	Prerequisite	✓
Semester	Quarter	Lower Division Core Courses 40 units		
Students need a "C" or better in MATH 130, MATH 131, MATH 210				
CHEM 110		General Chemistry for Engineering	Co-req MATH 130, MATH 125, OR MATH130	
ENGR 200	ENGR 1011	Introduction to Engineering and Design		
ENGR 210	2060,2070	Manufacturing Materials and Processes	CHEM 110 & MATH 130	
ENGR 215		Computational Methods in Engineering	MATH 131	
ENGR 220	INDE 3101	Statics	PHYS 135	
ENGR 230	ENGR 2010	Electric Circuits I	PHYS 136 & MATH 210	
MATH 130	1304,1305	Calculus I	MATH 120 or MATH 125	
MATH 131	1305,2304	Calculus II	C or better in MATH 130	
MATH 210		Linear Algebra with Differential Equations	MATH 130 Co-req MATH 131	
PHYS 135	1001,1002	Physics for Scientists and Engineers I	Co-req Math 130	
PHYS 136	1002,1003	Physics for Scientists and Engineers II	MATH 130 & PHYS 135	
PSYC 100	PSYC 1000	General Psychology		
Upper Division Core Courses 41 Units				
ENGR 320	INDE 3140	Engineering Economics	MATH 130	
INDE 330 Or STAT 316	INDE 3601 or STAT 3610	Engineering Statistics & Probability/ Statistics & Probability for Science & Engr	MATH 130/ MATH 131	
INDE 340	INDE 3602 or STAT 3602	Design of Engineering Experiments	INDE 330 or STAT 316	
INDE 360	INDE 3841	Operations Research	MATH 131	

INDE 390	3020/3190	Human Factors and Work Methods	INDE 330 or STAT 100; GE A1, A2, A3, and B4	
INDE 410	INDE 4430	Facility Planning, Design & Material Handling ENGR 210		
INDE 420	INDE 4200	Discrete Event Simulation	ENGR 215, and INDE 330 or STAT 316	
INDE 430	INDE 4280	Design of Work Systems	INDE 390	
INDE 440	INDE 4100	Sustainable Production & Supply Chain Sytm INDE 360, and INDE 330 or STAT 316		
INDE 450	INDE 4350	Systems Quality & Reliability	ENGR 210, and either INDE 330 or STAT 316	
INDE 460	INDE 4400	Service & Manufacturing Systems Modeling	INDE 360	
INDE 492	INDE 4620	Senior Design	Completion or enrollment in any three courses from: INDE 410, INDE 420, INDE 440, INDE 450, INDE 460.	
Elective Courses - Take 2 Courses for 6 Units				
With department approval select a minimum of 6 units of approved, upper-division 300 and above of Math/Basic Science elective courses. No General Education courses allowed				