## BACHELOR OF SCIENCE IN INDUSTRIAL ENGINEERING

Required Courses (128 Semester Hours)

Courses Required O	utside of Engineering - General Education (56 hrs)		
CHEM 112	General College Chemistry I	5	_
ENGL 160	Academic Writing I: Writing for Academic & Public Contex	3	
ENGL 161	Academic Writing II: Writing for Inquiry & Research	3	
MATH 180	Calculus I	5	
MATH 181	Calculus II	5	
MATH 210	Calculus III	3	_
MATH 220	Introduction to Differential Equations	3	
MATH 310	Applied Linear Algebra	3	
MGMT 340	Intro to Organizations	3	
PHYS 141	General Physics I (Mechanics)	4	_
PHYS 142	General Physics II (Electricity and Magnetism)	4	
-	Exploring World Cultures	3	
Class selection	Understanding the Creative Arts	3	
can be found	Understanding the Past	3	
in pages 49-60	Understanding the Individual and Society	3	
	Understanding U.S. Society	3	_

Courses Required in the College of Engineering (65 hrs)				
ENGR 100	Engineering Orientation	0		
CME 201	Statics	3	Т	
CME 203	Strength of Materials	3	1	
CS 108	FORTRAN Programming for Engineers	3		
ECE 210	Electrical Circuit Analysis	3		
IE 201	Financial Engineering	3		
IE 341	Ergonomics & Human Factors	3		
IE 342	Probability and Statistics for Engineers	3		
IE 345	Regres Appl and Forecasting in Engineering	3		
IE 365	Work Productivity Analysis	4		
IE 380	Manufacturing Process Principles	3		
IE 396	Senior Design <sup>b</sup>	4		
IE 446	Quality Control and Reliability	3		
IE 461	Safety Engineering	3		
IE 463	Plant Layout and Materials Handling	3		
IE 464	Virtual Automation	3		
IE 466	Production Planning and Inventory Control	3		
IE 467	Discrete Event Computer Simulation Application	3		
IE 471	Operations Research I	3		
IE 472	Operations Research II	3		
IE 499	Professional Development Seminar	0		
ME 205	Introduction to Thermodynamics	3		
ME 250	Engineering Graphics and Design	3		

Technical Electiv	es (3/4 hrs) Students must complete one course from t	oelow:	
IE 392	Undergraduate Research	3	
ME 210	Engineering Dynamics	3	
ME 211	Fluid Mechanics I	4	
ME 325	Intermediate Thermodynamics	3	
ME 447	Introduction to Computer-Aided Design	3	
IE 4XX	Any 400-level NOT required above	3	_

Non-IE Elective Course (3 h	nrs)

Free Elective Course (1 hr)	

<sup>&</sup>lt;sup>b</sup>ME 445 may be used as a substitute for ME 396; ME 444 is a prerequisite for ME 445.