

Navajo Technical University

Name: _____

ID#: _____

Bachelor of Science Degree – Industrial Engineering (122 Credits)

Semester ONE		Credits	Prerequisites	Semester/Transfer	Grade
ENGL1110	Composition I	3	ENGL098		
CS101	Programming I	3			
MATH1510	Calculus I	4	MTH150		
ENGR130	Engineering Graphics	3			
ENGR123	Computer Skills for Engineering	3			
Semester TWO					
EE101	Fundamentals of Electrical Engineering	3	CS 101, MATH1215		
ENGR103	Introduction to Engineering	3	ENGR130		
ENGR230	Advanced Engineering Graphics	3	ENGR130		
ENGR169	Basic Statistics and Probability	3	MATH1215		
ENGR143	Characteristics of Engineering Materials	3			
Semester THREE					
MATH1520	Calculus II	4	MATH1510		
CHEM1120	Introduction to Chemistry	3			
ENGL1120	Composition II	3	ENGL1210 or 1110		
IE223	Design & Manufacturing Processes I	3	ENGR143		
ENGR236	Inferential Engineering Statistics	3			
Semester FOUR					
NAV221	Navajo Government	3			
IE343	Design & Manufacturing Processes II	3	IE223		
PHYS1230C	Algebra Based Physics I Lecture & Lab	4	MATH1215		
IE235	Lean Production	3			
COMM1130	Public Speaking	3	ENGL1210 or 1110		
Semester FIVE					
IE380	Project Management	3			
HUMN1180	History of American Indians in Media	3			
ME345	Statics	3	MATH1230		
MTH410	Linear Algebra	3	MATH1520		
ENGR313	Engineering Economics	3			
Semester SIX					
MATH2410	Differential Equations	4	MATH1520		
HST211	American History 1877 to Present	3	ENGL098		
IE323	Human Factors in Product Design	3	ENGR236		
XXX	Technical Elective-Advisor Approval	3			
IE363	Design of Experiment	3	ENGR236		
Semester SEVEN					
IE413	Quality Control	3	IE363		
IE433	Metrology & Instrumentation	3	I223		
IE453	Operations Research	3	ENGR236 & MATH1520		
IE423	Capstone I	3	IE380		
Semester EIGHT					
IE424	Capstone II	3	IE423		
IE463	Facility Planning & Design	3	ENGR313		
IE473	Inventory Control & Production Plan	3	ENGR313		
IE494	System Simulation	3	ENGR236		
Fundamentals of Engineering Examination		NC			
	IE 483 Rapid Prototyping AMT 311- Laser Scanning Methods and Technique AMT 370 Robotics/Offline Programming PHY121 Calculus Based Physics, Special Topics				