

Navajo Technical University

Name: _____

ID#: _____

Bachelor of Applied Science Degree – Advanced Manufacturing (121 Credits)

Semester FIRST		CREDITS	Prerequisites	Semester / Transfer	Grade
ENGR 103	Introduction to Engineering	3	ENGR 130		
CS 101	Programming I	3			
ENGR 130	Engineering Graphics	3			
ENGL 1110	Composition I	3	ENGL 098		
ENGR 143	Characteristics of Engineering Material	3			
Semester TWO					
ENGR169	Basic Probability and Statistics	3	MATH 1215		
EE 101	Electrical Engineering Fundamentals	3	CS 101, MATH1215		
ENGR 230	Advanced Engineering Graphics	3	ENGR 130		
CHEM1217C	Principles of Chemistry I	4	MATH1220, CHEM1120		
MATH 1220	College Algebra	4	MATH1215		
Semester THREE					
ENGL 2120	Intermediate Composition	3	ENGL 1210 or ENGL 1110		
MATH 1230	Trigonometry	4	MTH1220		
IE 223	Design and Manufacturing Process I	3	ENGR 143		
PHYS 1230C	Algebra Based Physics I	4	MATH 1215		
HUMANITIES ELECTIVE		3			
Semester FOUR					
IE 343	Design & Manufacturing Process II	3	IE 223		
AMT 280	Computer-Numerical Control of Machine Tools	3	IE 223, ENGR 130		
ME 345	Statics	3	MATH 1230		
MATH 1510	Calculus I	4	MTH 150		
SOCIAL & BEHAVIORAL SCIENCE ELECTIVE		3			
Semester FIVE					
AMT 311	Laser Scanning Methods/Techniques	3			
AMT 210	Applied GD & T	3			
AMT 370	Introduction to Robotics	3			
IE 243	Strength of Materials	3	IE213		
Diné Studies	NAVA 1110, NAVA 2210 or NAVA 2220	3			
Semester SIX					
IE 484	Computer Aided Manufacturing & Robotics	3	ENGR 123		
TECHNICAL ELECTIVE		3			
IE 213	Structure & Property of Materials	3	PSYS1230C		
IE 483	Additive Manufacturing	3	IE223		
AMT 325	Digital Inspection/Quality Control	3			
Semester SEVEN					
AMT 401	Capstone I	4			
IE 463	Facility Planning & Material Handling	3	ENGR313		
AMT 415	Non-Destructive & Destructive Testing Methods	3	ENGR 123		
IE 433	Metrology and Instrumentation	3	IE223		
Semester EIGHT					
AMT 402	Capstone II	4			
IE 494	Computer Stimulation for Industrial Engineering	3	ENGR 236		
AMT 430	PLC Programming	3			
ENGL2310	Creative Writing	3			
TOTAL CREDIT HOURS REQUIRED		121			

	Signatures	Date
Student:		
Advisor:		
Registrar:		
Graduation Date:		