

Navajo Technical University

Name: _____

ID#: _____

Bachelor of Applied Science Degree – Advanced Manufacturing Engineering Technology (122-123) Credits)

Semester FIRST		CREDITS	Prerequisites	Semester / Transfer	Grade
ENGL 1110	Composition I	3	ENGL 100		
EE 101	Electrical Engineering Fundamentals	3			
MATH 1220	College Algebra	4	MATH 1215		
ENGR 130	Engineering Graphics	3			
ENGR 123	Introduction to Computing Technologies	3			
SSC 100	College Success Skills	1			
Semester TWO					
PHYS 1230C	Algebra Based Physics I	4	MATH 1215		
ENGR 103	Introduction to Engineering	3			
ENGR 230	Advanced Engineering Graphics	3	ENGR 130		
MATH 1230	Trigonometry	4	MATH 1220		
CS 101	Programming I	3			
Semester THREE					
MATH 1510	Calculus I	4	MATH 1230 & 1240		
ME 345	Statics	3	MATH 1230		
ENGR 143	Characteristics of Engineering Materials	3			
ENGL 2210	Professional & Technical Communication	3			
IE 223	Design and Manufacturing Processes I	3			
Semester FOUR					
CHEM 1120C	Introduction to Chemistry	4			
HUMN 1180	History of Native Americans in Media	3			
IE 343	Design & Manufacturing Processes II	3	IE 223		
IE 243	Strength of Materials	3	IE 213		
ENGR 169	Basic Statistics and Probability	3	MATH 1220		
Semester FIVE					
AMET 311	Laser Scanning Methods/Techniques	3			
AMET 210	Applied GD & T	3			
AMET 280	CNC of Machine Tools	3	IE 223, ENGR 130		
IE 413	Quality Control	3	IE 363		
Diné Studies XXX		3-4			
Semester SIX					
IE 483	Rapid Prototyping	3	IE 223		
AMET 415	NDT and DT Methods	3			
IE 484	Computer Aided Manufacturing	3	ENGR123&CS101		
HUMXXX	Humanities Elective	3			
XXX	Technical Elective	3			
Semester SEVEN					
AMET 401	Capstone I	4			
IE 433	Metrology and Instrumentation	3	IE 223		
IE 494	Computer Simulation for Industrial Engineering	3	ME 345 & IE243		
AMET 430	PLC Programming	3			
Semester EIGHT					
AMET 402	Capstone II	4			
AMET 370	Introduction of Robotics	3			
AMET 455	Product Design Process, Tooling, & Assembly	3	IE 343		
IE 380	Project Management	3			
HUM XXX	Humanities Elective	3			
TOTAL CREDIT HOURS REQUIRED		122-123			

Elective courses				
AMET-322	Structure & Property of Materials	3		
AMET-425	Additive Manufacturing	2 (Theory)+1 (lab)		
AMET - 412	Advanced Digital Inspection	3		
IE 388	Safety Engineering	3		

	Signatures	Date
Student:		
Advisor:		
Registrar:		
Graduation Date:		

Revised 7/26/2026