Navajo Technical University

Name: _____ ID#:_____

Bachelor of Science Degree – Electrical Engineering (124 Credits)

A Bachelor's degree in electrical engineering requires **124** credit hours and is designed for a four year program of study. Students in the baccalaureate program are required to complete a minimum of 42 credit hours in the upper division courses, i.e., 300 and 400 level courses before they can graduate. The minimum credit load for a full time student is 12 credit hours per semester and a minimum credit load to qualify for the NM scholarship is 15 credit hours per semester.

- **Core EE Requirements - 54 Credits**
- **General Education Requirements - 22 Credits**
- **Mathematics and Sciences –30 Credits**
- **Technical Electives – 18 Credits**

The Electrical Engineering (EE) Program is accredited by the Engineering Accreditation Commission (EAC) of ABET, https://www.abet.org, under the General Criteria and the Electrical Engineering Program Criteria.

Semester ONE		**Credits**	**Prerequisites**	**Semester/Transfer**	**Grade**
ENGL 1110	Composition I	3	ENGL100 or satisfactory placement scores		
ENGR 123	Computers Skills for Engineering	3			
EE 101	Electrical Engineering Fundamentals	3			
ENGR 130	Engineering Graphics	3			
MATH 1510	Calculus I	4	MATH 1230 & MATH 1240		
SSC 100	College Success	1			
Semester TWO					
CS 101	Programming I	3			
EE 102	DC Circuits and Systems	3			
ENGR 103	Introduction to Engineering	3			
ENGL 1120	Composition II	3	ENGLR 1210 or ENGL 1110		
MATH 1520	Calculus II	4	MATH 1510		
Semester THREE					
EE 103	Digital Circuits & Systems	3			
CHEM 1217C	General Chemistry with Laboratory	4	MATH 1220, CHEM 1120C		
PHYS 1310C	Calculus-Based Physics I	4	MATH 1220, MATH 1230, or MATH 1240		
MATH 2410	Differential Equations	4	MATH 1520		
Semester FOUR					
EE 201	AC Circuits & Systems	3	EE 102		
PHYS 1320C	Calculus Based Physics II	4	PHYS 1310C, MATH 1510		
NAVA 2210	Navajo Culture	3			
MATHXXX	MATH 2530, MATH 1350, or MTH 415	3-4			
CFA	ENGL 2310, ENGL 2520, ENGL 2330, NAVA 1310	3			
Semester FIVE					
EE 207	Introduction to Modeling Simulation	3	EE 103		
EE 212	Instrumentation II	2	EE 101		
EE 296	Sophomore Project	1	Sophomore Standing		
HUMNXXX	Humanities	3			
SSCXXXX	Social Science	3			
NAVA 2230	Navajo Government	3			
Semester SIX					
EE 301	Signals & Systems	3	EE 340		
EE 312	Instrumentation II	3	EE 212		
EE 340	Electronic Circuits & Systems	3	EE 201		
EE 396	Junior Research Project	3	EE 296		

ENGR 313	Engineering Economics	3	MATH 1215		
Semester SEVEN					
EE 422	Senior Project	3	EE 396		
EE 303	Probability & Random Signals	3	MATH 1510		
EE 412	Instrumentation III	3	EE 312		
XXX	Technical Elective Course	3			
MTH 410	Linear Algebra	3	MATH 1520		
Semester EIGHT					
EE 423	Capstone Design **	3			
XXX	Technical Elective	3			
XXX	Technical Elective	3			
XXX	Technical Elective	3			
Summer					
EE 313	Summer Internship	3			
TOTAL REQUIRED CREDIT HOURS:		**124**			

Listing of Technical Electives:

EE 310 Embedded System Design
EE 320 Instrumentation & Process Con.
EE 330 Compu Org. & Assem Lang.
EE 360 Intro to Electrical Machines
EE 370 Electrical Machines II
EE 380 Electrical Transmission & Dist.
EE 395 Special Topics
EE 406 Computer Networks
EE 412 Instrumentation III
EE 413 Summer Internship II
EE 430 Computer Arch & Des.
EE 440 Operating System I
EE 460 Electrical Power Plan.
EE 470 Electric Power Dev.
EE 471 Power System Analy.
EE 472 Power Electronic&PM
EE495 Special Topics
EE 3XX
EE 4XX

**Summer internship should be taken in a field that supports the chosen concentration.*

	Signatures	Date
Student:		
Advisor:		
Registrar:		
Graduation Date:		

Revised 6/14/2024