# **NC A&T Electrical Engineering**

(Unofficial Community Colleges to NC A&T Curriculum)

Degree Earned: NC A&T Bachelor of Science in Electrical Engineering Transfer GPA = 2.5

Effective: 2013-2014 Grey Highlighted Courses – Take at NC A&T

FRESHMAN YEAR					
Com College	<u>Fall Semester</u>	Credit	Com College	Spring Semester	Credit
NC A&T	ECEN 101 Intro. to Problem Solving	3	EGR 150	GEEN 100 Engineering Design and Ethics	2
MAT 271	MATH 131 Calculus I	4	ENG 112	ENGL 101 Ideas and their Expressions II	3
CHM 151	CHEM 106 General Chemistry IV	3	MAT 272	MATH 132 Calculus II	4
CHM 151	CHEM 116 General Chemistry IV Lab	1	PHY 251	PHYS 241 General Physics I	3
ACA 122	GEEN 111 Colloquium I - Student Success	1	PHY 251	PHYS 251 General Physics I Lab	1
ENG 111	ENGL 100 Ideas and their Expression I	3	HIS, PSY, SOC,	Social Science Elective [d]	3
			ECO		
15 1					
SOPHOMORE YEAR					
Com College	Fall Semester	Credit		Spring Semester	Credit
NC A&T	ECEN 121 ECE Colloquium I	1	HIS, PSY, SOC, ECO	Social Science Elective [d]	3
HUM, MUS, ART, REL,	Humanities Elective [d]	3	PHY 252	PHYS 242 General Physics II	3
PHI 240					
CSC 134	GEEN 160 Engineering Programming I	2	PHY 252	PHYS 252 General Physics II Lab	1
NC A&T	GEEN 161 Computer Applications in MATLAB	2	NC A&T	ECEN 300 Electric Circuit Analysis II	3
MAT 280	MATH 450 Linear Algebra and Matrix Theory	3	NC A&T	ECEN 306 Circuits and Systems Lab	2
NC A&T	ECEN 200 Electric Circuit Analysis	3	NC A&T	ECEN 212 Digital Logic	3
			NC A&T	ECEN 218 Digital Logic Lab	1
17					16
JUNIOR YEAR					
Com College	<u>Fall Semester</u>	Credit	Com College	Spring Semester	<u>Credit</u>
HUM, MUS,	Humanities Elective [d]	3	NC A&T	ECEN 400 Linear Systems and Signals	3
ART, REL,					
PHI 240					
NC A&T	ECEN 311 Intro to Microprocessors	3	NC A&T	ECEN 460 Electronics II	3
NC A&T	ECEN 317 Microprocessor Lab	1	NC A&T	ECEN 466 Electronics II Laboratory	1
NC A&T	ECEN 300 Electrical Circuit Analysis II	3	NC A&T	ECEN 410 Linear Control Systems	3
NC A&T	ECEN 306 Circuit and System Lab	2	NC A&T	INEN 360 Engineering Economy	2
MAT 273	MATH 231 Calculus III	3			16
16					
			R YEAR		
Com College	<u>Fall Semester</u>	Credit	Com College	Spring Semester	Credit
NC A&T	ECEN 498 Senior Design Project I [a]	3	NC A&T	ECEN 499 Senior Design Project [a]	3
NC A&T	ECEN 4XX Technical Elective I [b]	3	NC A&T	ECEN 4XX Technical Elective I [b]	3
NC A&T	ECEN 4XX Technical Elective I [b]	3	NC A&T	ECEN 4XX Technical Elective I [b]	3
NC A&T	ECEN 4XX Technical Elective I [b]	3	NC A&T	ECEN 4XX Technical Elective I [b]	3
NC A&T	ECEN 425 Introduction to Electromagnetics	3	NC A&T	Technical Elective II [c]	3
15					15

NC A&T - Minimum Credit Hours Required for Graduation in Electrical Engineering 126

# NC A&T Electrical Engineering (continued)

(Unofficial Community Colleges to NC A&T Curriculum)

# [a] Capstone Design Courses

### [b] Technical Elective I (A maximum of 2 courses from a given area):

(ECEN 449, ECEN 452, ECEN 459) (ECEN 525, ECEN 430, ECEN 450) (ECEN 502, ECEN 508, ECEN 570) (ECEN 423, ECEN 506, ECEN 547)

### [C] Technical Electives II:

ECEN 4xx, ECEN 5XX, ECEN 6XX

[d] At least (3) credit must come from African-American studies, and three (3) from global studies (recommend taking HIS 111, HIS 112 or REL 110 to satisfy Global Awareness requirement)