## Electrical Engineering (B.S.)

Students seeking a Bachelor of Science in Electrical Engineering must complete a minimum of 120 credit hours, including core courses in Electrical Engineering, Computer Programming, Mathematics, Science, Liberal Arts, Humanities / Social Sciences, and African American Studies. This program is accredited by the Engineering Accreditation Commission of ABET.

#### Freshman Year First Semester

ltem #	Title	Credits
MATH 156	Calculus I	4
EGPP 101	Introduction to Engineering	2
CSCI 135	Computer Science I	4
CHEM 003	Gen Chemistry I	4
CHEM 005	Gen Chem Lab I	1
	Sub-Total Credits	15

#### Freshman Year Second Semester

Item #	Title	Credits
MATH 157	Calculus II	4
EECE 102	Intro to Elec & Comp Eng	1
EECE 260	Eng. Programming & Application	3
PHYS 013	Phys for Sci & Engr Lec I	3
PHYS 023	Phys for Sci & Engr Lab I	1
	ENGW 101/102/104	3
	Sub-Total Credits	15

# Sophomore Year First Semester

Item #	Title	Credits
MATH 158	Calculus III	4
PHYS 014	Phys for Sci & Engr Lec II	3
PHYS 024	Phys for Sci & Engr Lab II	1
EECE 212	Fundamental of Digital Systems	4
EECE 218	Fund of Digital Systems Lab	1
MATH 159	Differential Equations	4
	Sub-Total Credits	17

# Sophomore Year Second Semester

ltem #	Title	Credits
EECE 160	Engineering Math	4
EECE 203	Fundamental of Circuit Theory	4
EECE 209	Fundl of Circuit Theory Lab	1
	ENGW 103/105	3
	Social Science Elective	3
	Sub-Total Credits	15

#### Junior Year First Semester

Item #	Title	Credits
EECE 305	Fund: Electromagnetics	4
EECE 306	Fund: Electromagnetics Lab	1
EECE 309	Fund: Electronics & SS Devices	4
EECE 312	Fund: Elec & SS Devices Lab	1
EECE 331	Probability and Statistics for Eng. Applications	3
	Humanities Elective	3
	Sub-Total Credits	16

## Junior Year Second Semester

Item #	Title	Credits
EECE 333	Fndmntls of Signals & Systems	4
EECE 325	Fundamentals of Energy Systems	4
EECE 326	Fndmnts of Energy Systems Lab	1
	Afro-American Studies Elective * (Options: see Elective Group	3
	Descriptions)	
	Math/Science Elective Course	3
	Sub-Total Credits	15

#### Senior Year First Semester

Title	Credits
Senior Design I	3
EE/CpE Elective	3
Sub-Total Credits	15
	Senior Design I  EE/CpE Elective  EE/CpE Elective  EE/CpE Elective  EE/CpE Elective

#### Senior Year Second Semester

ltem #	Title	Credits
EECE 404	Senior Design II	3
ECON 001	Principles of Economics I	3
	EE/CpE Elective	3
	EE/CpE Elective	3
	Sub-Total Credits	12
	Total credits:	120

#### **Category Descriptions**

#### ENGW 101/102/104

Choose between ENGW 101, ENGW 102, OR ENGW 104

## ENGW 103/105

#### **Social Science Elective**

#### **Humanities Elective**

# <u>Afro-American Studies Elective \* (Options: see Elective Group Descriptions)</u>

ENGL 054	Afro-American Lit to 1940	3
ENGL 055	Afro-American Lit From 1940	3
AFRO 005	Intro Afro-American Studies I	3
AFRO 006	Intro Afro-America Studies II	3
HIST 005	Intro Black Diaspora I	3
HIST 006	Intro to Black Diaspora II	3
AFST 101	Intro to Contemporary Africa	3
FASH 102	African American Dress	3
POLS 006	Pan-Africanism	3
MUTP 100	Blacks in the Arts	3
HIST 005 HIST 006 AFST 101 FASH 102 POLS 006	Intro Black Diaspora I Intro to Black Diaspora II Intro to Contemporary Africa African American Dress Pan-Africanism	3 3 3 3 3 3

# Math/Science Elective Course

MATH 180	Intro to Linear Algebra	3
CHEM 005	Gen Chem Lab I	1
PHYS 015	Intro to Modern Physics	3

#### **EE/CpE Elective**

EECE 4xx Courses.

CSCI 4xx Courses.