

# Computer Engineering (B.S.)

The Department offers a program of study geared to students who wish to pursue careers in the emerging field of software engineering. The undergraduate curriculum provides students with a comprehensive knowledge of the theory, design and application of digital computers, information processing technologies and systems engineering. The program is accredited by the Computing Accreditation Commission of ABET.

## Please Note:

1. PHY023 is a co-requisite for PHY 013.
2. PHY024 is a co-requisite for PHY 014.

## Freshman Year First Semester

Item #	Title	Credits
MATH 156	Calculus I	4
CSCI 135	Computer Science I	4
CHEM 003	Gen Chemistry I	4
CHEM 005	Gen Chem Lab I	1
<b>Sub-Total Credits</b>		<b>15</b>

## 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 024	Phys for Sci & Engr Lab II	1
MATH 181	Discrete Structures	3
<b>Sub-Total Credits</b>		<b>15</b>

## 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
<b>Sub-Total Credits</b>		<b>17</b>

## Sophomore Year Second Semester

Item #	Title	Credits
EECE 160	Engineering Math	4
EECE 203	Fundamental of Circuit Theory	4
EECE 209	Fundl of Circuit Theory Lab	1
EECE 406	Adv Dig Systems Design	3
EECE 412	Adv Digital Systems Design Lab	1
<b>Sub-Total Credits</b>		<b>13</b>

## 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
	ENGW 101/102/104	3
<b>Sub-Total Credits</b>		<b>16</b>

## Junior Year Second Semester

Item #	Title	Credits
EECE 333	Fndmntls of Signals & Systems	4
EECE 416	Miccomputer Design	3
EECE 410	Intro to Computer Networks	3
	Afro-American Studies Elective * (Options: see Elective Group Descriptions)	3
	ENGW 103/105	3
<b>Sub-Total Credits</b>		<b>16</b>

## Senior Year First Semester

Item #	Title	Credits
EECE 401	Senior Design I	3
EECE 420	Intro to VLSI Design	3
EECE 423	Intro. to VLSI Design Lab	1
EECE 417	Computer Systems Architect	3
	Social Science Elective	3
<b>Sub-Total Credits</b>		<b>13</b>

## Senior Year Second Semester

Item #	Title	Credits
EECE 404	Senior Design II	3
ECON 001	Principles of Economics I	3
	CpE Elective	3
	Math/Science Elective Course	3
	Humanities Elective	3
	<b>Sub-Total Credits</b>	<b>15</b>
	<b>Total credits:</b>	<b>120</b>

## Category Descriptions

### ENGW 101/102/104

Choose between ENGW 101, ENGW 102, OR ENGW 104

### Afro-American Studies Elective \* (Options: see Elective Group Descriptions)

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

### ENGW 103/105

### Social Science Elective

### CpE Elective

### 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
COMP 001	Life Sciences Lecture-Laboratory	3
COMP 002	Planetary Science Lecture-Laboratory	3

# Humanities Elective