

**Curriculum Guide for  
Bachelor of Science Electronics Technology (Fall 2012)  
Major Code: 0340**

**FRESHMAN YEAR**

<i>First Semester</i>		<i>Credits</i>	<i>Second Semester</i>		<i>Credits</i>
ECT 101	Microcomputer Applications	3	ECT 201	Introduction to Computer Programming	3
ECT 120	Quantitative Fundamentals	3	ECT 211	Electric Circuits I	3
ITT 420	Introduction to Unix/Linux	3	ITT 111	Managing, Maintaining, and Troubleshooting Hardware	3
MATH 110	Pre-Calculus for Eng/Sci	4	MATH 131	Calculus I	4
	Written Communications <sup>(1)</sup>	<u>3</u>		Written Communications <sup>(1)</sup>	<u>3</u>
		16			16

**SOPHOMORE YEAR**

<i>First Semester</i>		<i>Credits</i>	<i>Second Semester</i>		<i>Credits</i>
ECT 212	Electric Circuits II	3	ECT 213	Digital Circuits	3
ITT 240	Applied Java Programming	3	ITT 185	Economic and Social Impacts of IT	3
MATH 132	Calculus II	4	ITT 325	Introduction to Computer Database	3
PHYS 225	College Physics I	3	PHYS 226	College Physics II	3
PHYS 235	College Physics I Lab	1	PHYS 236	College Physics II Lab	1
	Humanities and Fine Arts HFA-AA <sup>(2)</sup>	<u>3</u>	SPCH 250	Speech Fundamentals	<u>3</u>
		17			16

**JUNIOR YEAR**

<i>First Semester</i>		<i>Credits</i>	<i>Second Semester</i>		<i>Credits</i>
ITT 315	Network Security	3	CHEM 106	General Chemistry VI <sup>(4)</sup>	3
ITT 329	Computer Networking I	3	CHEM 116	General Chemistry VI Lab <sup>(4)</sup>	1
MATH 224	Introduction to Probability and Statistics	3	ITT 300	Introduction to Project Management	3
	Track Elective TE <sup>(3)</sup>	3		Humanities and Fine Arts HFA-GL <sup>(5)</sup>	3
	Track Elective TE <sup>(3)</sup>	<u>3</u>		Track Elective TE <sup>(3)</sup>	3
		15		Track Elective TE <sup>(3)</sup>	<u>3</u>
					16

**SENIOR YEAR**

<i>First Semester</i>		<i>Credits</i>	<i>Second Semester</i>		<i>Credits</i>
ITT 598	Senior Capstone Project	3	ECT 598	Senior Project Capstone Experience	3
	Track Elective TE <sup>(3)</sup>	3	MGMT 220	Business Environment	3
	Track Elective TE <sup>(3)</sup>	<u>3</u>		Humanities and Fine Arts/General	3
	Social and Behavioral Sciences SBS <sup>(6)</sup>	3		Track Elective TE <sup>(3)</sup>	3
	Social and Behavioral Sciences SBS <sup>(6)</sup>	<u>3</u>		Track Elective TE <sup>(3)</sup>	<u>3</u>
		15			15
Total Credit Hours:		126			

(1) General Education Electives – Written Communications (WC) – A total of 6 hours is required.

(2) General Education Electives – Humanities and Fine Arts Knowledge of African-American Culture and History (HFA-AA) – A total of 3 hours is required.

(3) Track Electives – Track Electives (TE) – A student must complete at least 2 tracks in their entirety. (See next page.)

(4) General Education Electives – Scientific Reasoning (SR) – A total of 4 hours is required. Students may take CHEM 106/116 or BIOL 100.

(5) General Education Electives – Humanities and Fine Arts Global Awareness (HFA-GL) – A total of 3 hours is required. Students may take any course from the HFA-GL course list.

(6) General Education Electives – Social and Behavioral Science (SBS) – A total of 6 hours is required. Students may take any course from the SBS course list.

**Effective Fall 2012**

**Provost Approved 5/30/2012**

### **Track Electives**

**Students must complete courses from at least two different tracks. Tracks are to be completed in their entirety. A track consists of up to four courses with a particular emphasis. A total of 24 credit hours of track electives is required. The following is a list of tracks. Please see your advisor to receive an updated list of tracks.**

#### *Storage Technology*

ITT 305 Foundation of Storage Technology

#### *Wireless Systems*

ECT 350 Communications Systems

ECT 550 Wireless Communication Sys I

ECT 565 Wireless Geo-Location Sys I

#### *Mainframe Computing*

ITT 340 Introduction to Mainframe Operations

#### *High Performance Computing*

ITT 433 Intro to High Performance Computing

ITT 434 HPC architecture and system administration

ITT 435 Intro to parallel programming

#### *Computer Engineering Technology*

ECT 413 Advanced Digital Systems

ECT 414 ASIC/FPGA Design

ECT 432 Computer Systems Architecture

ECT 434 High Performance Computing Architecture and System Administration

#### *Information Management*

ITT 525 Computer Database Management

ITT 326 Database Security

#### *Enterprise Computing*

ITT 430 Linux System Administration

ITT 575 Video Communications

#### *Security*

ITT 315 Network Security Applications for Info Tech

ITT 316 Information Security

ITT 515 Advanced Network Security Application

#### *Networking*

ITT 315 Network Security Application for Info Tech

ITT 316 Information Security

ITT 330 Computer Networking II