Program Map: Electronics Engineering Technology Engineering Technology Department, College of Science and Technology

lame: tart E	Date:	SID Cat	: alog Date	:	Advisor: Expected	Graduation	n Date:
		Fall Courses	0		Spring Courses		Notes
Freshman	Course	Name	Hours	Course	Name	Hours	
	ENGL 1101*	Composition I	3	ENGL 1102*	Composition II	3	*A grade of C or better must be earned for this course Accumulate minimum of 30 semester hours in your Freshmen Year.
	Core Area A	Pre-requisite: None		Core Area A	Pre-requisite: ENGL 1101		
	MATH 1113* Core Area A	Pre-Calculus Pre-requisite: MATH 1111	3	MATH 2101* Area F	Calculus I Pre-requisite: MATH 1113	4	
	CHEM 1211*	Principles of Chemistry I**	3	PHYS 1111K*	Introductory Physics I	4	
	Area F	Pre-requisite: CHEM 1115 OR 30 in Chemistry Assessment Test	5	Area D Lab	Pre-requisite: MATH 1113	т 	
	CHEM 1211L* Area F	Principles of Chemistry I Lab** Pre-requisite: None	1	ELET 3101K* Major ELET Core	Electrical Circuit I Pre-requisite: MATH 1113	4	
	CSCI 1130 Area D (non-lab)	Computer & its Applications* Pre-requisite: None	3	CSCI 1301* or 1371* Major	Computer Science I or Computing for Engineers Pre-requisite: MATH 1111 Pre-requisite: MATH 1113	3	
	COST 1103 Area F	COST First Year Experience Pre-requisite: None	2				
		Fall Milestones	Total		Spring Milestones	Total	
	Students must take MATH 1113 to prevent delay in graduation		15	Students must take graduation	ELET 3101K to prevent delay in	18	
	Fall Courses				Spring Courses		Notes
	Course	Name	Hour		Name	Hours	
Sophomore	MATH 2111* Area F	Calculus II Pre-requisite: MATH 2101	4	ELET 3311K* Major ELET Co	Digital Systems II Pre-requisite: ELET 3301K	4	*A grade of C or better must be earned for this course Accumulate minimum of 60 semester hours in your Sophomore Year.
	PHYS 1112K* Area D Lab	Introductory Physics II Pre-requisite: PHYS 1111K	4	Core Area C Oj	Pre-requisite: Varies	3	
	ELET 3301K* Major ELET	Digital Systems I Pre-requisite: ELET 3101K	4	HUMN 1201 Core Area B	Critical Thinking & Communication Pre-requisite: None	3	
	Core ELET 3111K*	Electrical Circuit II	4	ENGT 3502K	Applied Machine Learning	3	
S	Major ELET Core	Pre-requisite: ELET 3101K		ENGT 5502K	Pre-requisite: CSCI 1301 or CS 1371		
		Fall Milestones	Tota	1	Spring Milestones	Total	
	Students must take 3301K to prevent d	MATH 2111, ELET 3111K, and ELET lelay in graduation	16			13	
		Fall Courses			Spring Courses	•	N
	Course	Name	Hours	Course	Name	Hours	Notes
nior	ELET 3201K* Major ELET Core	Electronics I Pre-requisite: ELET 3101K	4	ELET 3211K* Major ELET Core	Electronics II Pre-requisite: ELET 3201K	4	*A grade of C or better must l earned for this course
	ELET 3411K* Major ELET Core	Microcontrollers Pre-requisite: ELET 3301K	4	ELET 3511K* Major ELET Core	Electrical Machinery Pre-requisite: ELET 3111K	4	Accumulate minimum of 90 semester hours in your Junior Year.
	POLS 1101 Core Area E	American Government Pre-requisite: None	3	ENGT 2101K* Area F	Computer Graphics Pre-requisite: MATH 1113	3	Apply for graduation.
Ju	AFRS 1501	Survey African American History	2	HIST 2111 or	U.S. History	3	
ſ	Area B	Pre-requisite: None		2112 Core Area E	Pre-requisite: None		Students are encouraged to obtain an internship, which ca
	Area C Option		3	Area E Social		3	be used for Major Technical
		Pre-requisite: Varies		Sci. Option	Pre-requisite: Varies		Elective Credit; communicate with the Department Chair to
		Fall Milestones	Total	~ / /	Spring Milestones	Total	register for the internship
			16	Student must take graduation	ELET 3211K to prevent delay in	17	course and get it approved for credits prior to the internship.
Senior		Fall Courses			Spring Courses		Notes
	Course	Name	Hours	Course	Name	Hours	
	ELET 4101K* Major ELET Core	Programmable Logic Controllers Pre-requisite: ELET 3301K	4	MAJOR*	ELET Option Pre-requisite: Varies	4	*A grade of C or better must be earned for this course
	MAJOR*	ELET Option Pre-requisite: Varies	4	MAJOR*	ELET Option Pre-requisite: Varies	4	Student must take the exit
	MAJOR*	CSCI Option Pre-requisite: Varies	3	ENGT 3701* Major	Engineering Economy Pre-requisite: MATH 1113	3	exam and interview.
	ENGT 4401* Major	Senior Project Pre-requisite: ELET 3411K, ELET 3701K, ELET 3311K,	3	Area E Social Sci. Option	Pre-requisite: None	3	Does this Degree Program Require a Minor? <u>No</u> Total Hours Required for this
		ELET 3211K	m i i			T ()	Degree Program: <u>123</u>
		Fall Milestones	Total		Spring Milestones	Total	00- <u></u>

Spring Milestones

Total

14

Fall Milestones

Total

14

Core Curriculum (Programmed Preferred Options in Bold)

Area B - Institutional Options 5 hrs

- AFRS 1501 Survey of African-American Experience 2 hrs i.
- HUMN 1201 Critical Thinking & Communication 3 hrs ii.
- Area C Humanities/Fine Arts, and Ethics 6 hrs,
 - Select one of the following: 1.
 - ENGL 2111 World Literature I 3 hrs i.
 - ii. ENGL 2112 World Literature II 3 hrs
 - iii. ENGL 2121 British Literature I 3 hrs
 - iv. ENGL 2122 British Literature II 3 hrs
 - ENGL 2131 American Literature I 3 hrs v.
 - ENGL 2132 American Literature II 3 hrs vi.
 - vii. ENGL 2222 African American Literature 3 hrs
 - viii. PHIL 2010 Introduction to Philosophy 3 hrs
 - PHIL 2030 Introduction to Ethics 3 hrs ix.
 - Select one of the following: 2
 - ARTS 1101 Introduction to Visual Art 3 hrs i.
 - DNCE 2010 Dance Appreciation 3 hrs ii.
 - iii. ENGL 2521 Introduction to Film 3 hrs
 - iv. HUMN 2011 Humanities 3 hrs
 - MUSC 1101 Introduction to Music 3 hrs v
 - vi. THEA 2101 Introduction to Theatre 3 hrs
- Area D Natural Sciences, Math & Technology 11 hrs
- Select one of the following: 1.
 - BIOL 1107 Principles of Biology I 3 hrs i.
 - BIOL 1108 Principles of Biology II 3 hrs ii.
 - CHEM 1211 Principles of Chemistry I 3 hrs iii.
 - CHEM 1212 Principles of Chemistry II 3 hrs iv.
 - CISM 1130 Computer Applications 3 hrs v.
 - **CSCI 1130 Computer Applications 3 hrs** vi.
 - CSCI 1301 Computer Science I 3 hrs vii.
 - viii. ENVS 1140 Environmental Issues 3 hrs
 - 2. Select two of the following lab sciences insequence:
 - i. BIOL 1107/1107L Principles of Biology I 4 hrs
 - ii. BIOL 1108/1108L Principles of Biology II 4 hrs
 - iii. CHEM 1211/1211L Principles of Chemistry 4 hrs
 - CHEM 1212/1212L Principles of Chemistry 4 hrs iv.
 - PHYS 1111K Introductory Physics I 4 hrs v.
 - PHYS 1112K Introductory Physics II 4 hrs vi.
 - vii. PHYS 2211K Principles of Physics I 4 hrs
 - PHYS 2212K Principles of Physics II 4 hrs viii.

Area E - Social Science 12 hrs

- POLS 1101 American Government 3 hrs i.
- Select one of the following: 2.
 - HIST 2111 U.S. History to the Post-Civil War Period 3 hrs i.
 - HIST 2112 U.S. History from the Post-Civil War to Pre 3 hrs ii. Select two of the following:
- 3.
 - i. AFRS 2000 Introduction to Africana Studies 3 hrs
 - ANTH 1101 Introduction to Anthropology 3 hrs ii.
 - ECON 2105 Principles of Macro-Economics 3 hrs iii.
 - GEOG 1101 Introduction to Human Geography 3 hrs iv.
 - HIST 1111 World Hist to Early Modern Times 3 hrs v.
 - vi. HIST 1112 World History Early Modern Times to Pres 3 hrs
 - POLS 2401 Global Issues 3 hrs vii.
- PSYC 1101 Intro to General Psychology 3 hrs viii.
- PSYC 2103 Human Growth & Development 3 hrs ix.
- SOCI 1101 Introduction to Sociology 3 hrs х.
- xi. SOCI 1160 Social Problems 3 hrs

Electronics Engineering Technology Major Technical Options

CSCI Option: Select One (3hr)

CSCI 2601K	Information security fundamentals	3 credits
CSCI 3385K	Computer Network & Design	3 credits
ELET Option:	Select Three(12hrs)	
ELET 3401K	Microcomputer Interfacing	4 credits
ELET 3412K	Cybersecurity and embedded systems	4 credits
ELET 3501K	Control Systems	4 credits
ELET 3701K	Data Acquisition Systems	4 credits
ELET 4401K	Industrial Electronics	4 credits
ELET 4412K	Network defense & counter measures	4 credits
ELET 4611K	Fiber Optics	4 credits
ELET 4621K	Digital Communications	4 credits

Distinctive Courses/Descriptions

Electronics Engineering Technology

The Electronics Engineering Technology (EET) curriculum provides instruction in the fundamentals of modern electronics theory, with emphasis on the application of theoretical principles to actual electronic devices, circuits and systems. Graduates of the Electronics Engineering Technology program are prepared to function in these positions:

Research and Development Technologist - engages in the development, building and testing of new equipment in the areas of digital electronics, communication electronics, embedded systems and microelectronics.

Process Control Technologist - supervises the operation of automatic control equipment for industrial processes.

Field Engineering Specialist - installs, tests and maintains equipment such as data processing machines and other electronic systems.

High Frequency Technologist - maintains and/or operates radar, sonar and other warning detection and navigation devices.