Program Overview

somerset.kctcs.edu

Engineering & Electronics Technology

AAS Degrees in Engineering & Electronics Technology: Electronics Track and Computer Maintenance Track

PROGRAM ADVISORS

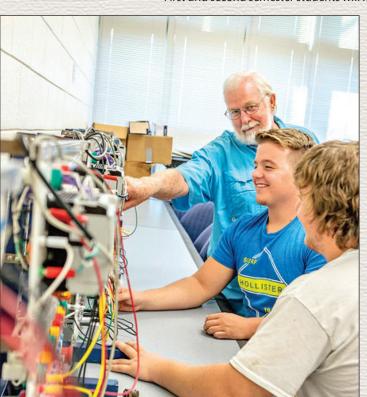
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David Coffey (Laurel Campus) (606) 878-4739 david.coffey@kctcs.edu

PROGRAM DETAILS

Engineering and Electronics Technology focuses on training, preparation, and employment of the student in the growing field of electronics. The study of theory, combined with laboratory exercises forms the foundation of the program. Engineering and Electronics Technology is designed to keep pace with this ever changing field. The program is reviewed semi-annually by representatives from the local area to ensure curriculum and training are in compliance with their needs.

First and second semester students will learn in-depth AC



and DC theory, plus the internal workings of a computer through the study of digital electronics.

Third and fourth semester students will build plasma speakers and tesla coils. They will also construct PC's and other labs inspired by the students.

Engineering
and Electronics
Technology
graduating
students have
an opportunity
to be placed in a
variety of work
environments,
such as

electronic manufacturing maintenance, home and business security systems installation and maintenance, computer hardware and software maintenance. Other employment opportunities include network administration, E-commerce (such as Amazon.com), and includes entrepreneurs that start their own business, such as being a subcontractor for Windstream or as an entrepreneur for a computer technologies business.

ENGINEERING & ELECTRTONICS TECHNOLOGY CREDENTIALS:

CERTIFICATES

- •Computer Maintenance Technician † (17 credit hours)
- •Communications Technician* (27 credit hours)
- •Electronics Technician* (24 credit hours)
- •Electronics Tester (13 credit hours)
- •Robotics and Automation Technician* † (33 credit hours)

DIPLOMA OPTIONS

- •Computer Maintenance* †
 (52 credit hours)
- •Communications* (55 credit hours)
- •Electronics* (51-53 credit hours)

ASSOCIATE IN APPLIED SCIENCE DEGREES

- Electronics Track
 - (62-64 credit hours)
- •Computer Maintenance Track † (63-66 credit hours)

† Only offered on the Somerset Campus

*A Federal Gainful Employment program Learn more on SCC's website: somerset.kctcs.edu/ Academics/Programs of Study/Engineering

Academics/Programs of Study/Engineering and Electronics Technology



PROGRAM LOCATIONS

This program is located on both the Somerset and Laurel campuses.



Somerset Community College Advising Planner

Engineering & Electronics Technology

AAS Degree in Computer Maintenance Specialization and AAS Degree Electronics Specialization

somerset.kctcs.edu

SEMESTER COURSE LISTING

REQUIRED COURSES FOR AAS DEGREES IN ELECTRONICS AND COMPUTER MAINTENANCE

	CTRONICS AND COMPUTER MAINTER	VANC	E	Class (Alternative) Credit
GENERAL EDUCATION REQUIREMENTS (18-19 HOURS) Credit Grade			Grade	SEMESTER ONE (16 HOURS)
MAT 150	College Algebra <u>OR</u>	3		ELT 110 ()
MAT 126	Technical Algebra and Trigonometry	(3)		ELT 114 ()
PHY 171	Applied Physics <u>OR</u>	3		Social Interaction ()
	Other Natural Sciences with Consent of Program Coordinator	(3)		Technical Elective ()
ENG 101	Writing 1	3		reclinical Elective (
	Social/Behavioral Sciences	3		SEMESTER TWO (16 HOURS)
	Oral Communications	3		ELT 120 ()
	Heritage/Humanities	3		
	•			ELT 220 ()
CORE (24-25 HOURS)			ELT 210 ()	
ELT 110	Circuits I	5		Heritage/Humanities ()
ELT 114	Circuits II	5		Technical Elective ()
ELT 210	Devices I	4		
ELT 120	Digital I	3		SEMESTER THREE (17 HOURS)
CAD 100	Introduction to Computer Aided Design OR	3		, , ,
	Equivalent Course with Consent of Program Coordinator	(3-4)		Computer Literacy ()
	Computer/Digital Literacy	3		PH 171 ()
ELT 289	Engineering and Electronics Technology Capstone Course	1		ELT 289 ()
				Writing I ()
	TRACK (20 HOURS)			Technical Elective ()
ELT 214	Devices II	4		MAT 126 <u>OR</u>
ELT 220	Digital II	3		MAT 150 ()
	Technical Electives*	13		MAI 150 ()
TOTAL HOURS FOR PROGRAM — 62-64				SEMESTER FOUR (14 HOURS)
*Technical Electives: Any EET, ET, ELT, IMT, CIS, CIT, NIS, IT, ISM, CAD, ICT, MFG,			ELT 214 ()	
				CAD 100 ()
	or any other course as approved by the program coordinator.			Oral Communications ()
COMPLITED M	IAINTENANCE TRACK (21-22 HOURS) Only offered on the S	omorcot	Campus	Technical Elective ()
ELT 234	Computer Hardware Maintenance <u>OR</u>	3	Campus	
IT 105	Computer Maintenance Essentials <u>OR</u>	(3)		
ELT 105	Computer Maintenance Essentials <u>ON</u>	(3)		TOTAL HOURS FOR PROGRAM — 63-66
ELT 232	Computer Maintenance Essentials Computer Software Maintenance OR	(3)		
IT 205	Advanced Computer Maintenance <u>OR</u>	(3)		
ELT 205	Advanced Computer Maintenance	(3)		
ELT 220 NIS 160	Digital II	3		
IT 120	Networking Core Technologies <u>OR</u> Circa Interpotworking LOP			
	Cisco Internetworking I <u>OR</u> Data Communications and Networking	(4)		
CIT 160	TECHNICAL ELECTIVES	(4) 9		
	TOTAL HOURS FOR PROGRAM -	- 63-66		
UDENT		ID NO		DATE
UDENI		וט אט		DATE

ADVISOR

Revised: 02/2018

SIGNATURE