ELECTRONICS ENGINEERING TECHNICIAN
Electronics Engineering Technology (A40200)

ENGINEERING AND TECHNOLOGY PATHWAYS

These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subject areas.

Course work includes mathematics, natural sciences, and engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, construction technicians and mangers, industrial and technology managers, or research technicians.

PROGRAM DESCRIPTION

A course of study that prepares the students to use basic engineering principles and technical skills to become technicians who design, build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems such as industrial/computer controls, manufacturing systems, communication systems, and power electronic systems. Includes instruction in mathematics, basic electricity, solid-state fundamentals, digital concepts, and microprocessors or programmable logic controllers. Graduates should qualify for employment as electronics engineering technician, field service technician, instrumentation technician, maintenance technician, electronic tester, electronic systems integrator, bench technician, and production control technician.

COURSE REQUIREMENTS

Richmond Community College provides day and evening course sequences for selected programs to enable students to better plan what courses to take to reach their educational goals. However, given the continued increase in the use of technology in instruction and increasing student demand for distance learning courses, the College may offer hybrid, online, web-based and information highway courses in place of traditional courses in any course sequence that is listed. Therefore, students should be aware of this possibility and prepare themselves to successfully function in a hybrid, online, web-based, or information highway course.

			Class	Lab	Work/ Clinical	Credit
A. General Education Courses						
1. Required Courses						
ENG	111	Writing and Inquiry	3	0	0	3
ENG	112	Writing/Research in the Disciplines	3	0	0	3
MAT	171	Precalculus Algebra	3	2	0	4
		Humanities/Fine Arts Elective*	3	0	0	3
		Social/Behavioral Sciences Elective*	3	0	0	3
B. Major Courses						
1. Core Courses						
To receive a degree, diploma or certificate from RCC, a student must have a grade of "C" or better in all core courses for the program of study.						

	ELC	131	Circuit Analysis I	3	3	0	4
	ELN	131	Analog Electronics I	3	3	0	4
	ELN	132	Analog Electronics II	3	3	0	4
	ELN	133	Digital Electronics	3	3	0	4
	ELN	232	Introduction to Microprocessors	3	3	0	4
	ELN	260	Prog Logic Controllers	3	3	0	4
2.	Other Major Courses						
	ATR	112	Intro to Automation	2	3	0	3
	CIS	110	Introduction to Computers	2	2	0	3
	DFT	151	CAD I	2	3	0	3
	EGR	285	Design Project	0	4	0	2
	or						
	WBL	111	Work-Based Learning I	0	0	10	1
	and						
	WBL	115	Work-Based Learning Seminar I	1	0	0	1
	ELC	213	Instrumentation	3	2	0	4
	ELN	231	Industrial Control	2	3	0	3
	HYD	110	Hydraulics/Pneumatics I	2	3	0	3
	MAT	172	Precalculus Trigonometry	3	2	0	4
	NET	125	Introduction to Networks	1	4	0	3
C.	**Other Required Courses**						
	ACA	122	College Transfer Success	0	2	0	1
			Total Credit Hours			**69**	

*Approved Electives are listed on the page before the Course Descriptions.

SEMESTER SCHEDULE
ELECTRONICS ENGINEERING TECHNOLOGY (DAY)

			Class	**Lab**	**Work/ Clinical**	**Credit**
		First Year – Fall Semester				
ACA	122	College Transfer Success	0	2	0	1
CIS	110	Introduction to Computers	2	2	0	3
ELC	131	Circuit Analysis I	3	3	0	4
ENG	111	Writing and Inquiry	3	0	0	3
MAT	171	Precalculus Algebra	3	2	0	4
			11	9	0	15
		First Year – Spring Semester				
COM	231	Public Speaking	3	0	0	3
or						
ENG	112	Writing/Research in the Disciplines	3	0	0	3
ELN	131	Analog Electronics I	3	3	0	4
ELN	133	Digital Electronics	3	3	0	4

ELN	231	Industrial Control	2	3	0	3
MAT	172	Precalculus Trigonometry	3	2	0	4
			14	11	0	18
		First Year – Summer Semester				
		Humanities/Fine Arts Elective*	3	0	0	3
		Social/Behavioral Sciences Elective*	3	0	0	3
			6	0	0	6
		Second Year – Fall Semester				
DFT	151	Computer Aided Drafting I	2	3	0	3
ELN	132	Analog Electronics II	3	3	0	4
ELN	232	Introduction to Microprocessors	3	3	0	4
ELN	260	Programmable Logic Controllers	3	3	0	4
			11	12	0	15
		Second Year – Spring Semester				
ATR	112	Intro to Automation	2	3	0	3
EGR	285	Design Project	0	4	0	2
or						
WBL	111	Work-Based Learning I	0	0	10	1
and						
WBL	115	Work-Based Learning Seminar I	1	0	0	1
ELC	213	Instrumentation	3	2	0	4
HYD	110	Hydraulics/Pneumatics I	2	3	0	3
NET	125	Introduction to Networks	1	4	0	3
			8-9	12-16	0-10	15

Total Credit Hours **69**

*Approved Electives are listed on the page before the Course Descriptions.

EET: ELECTRONICS TECHNOLOGY (CERTIFICATE) (C40200)
COURSE REQUIREMENTS

			Class	**Lab**	**Work/ Clinical**	**Credit**
ACA	122	College Transfer Success	0	2	0	1
ELC	131	Circuit Analysis I	3	3	0	4
ELN	131	Analog Electronics I	3	3	0	4
ELN	133	Digital Electronics	3	3	0	4
ELN	231	Industrial Control	2	3	0	3

Total Credit Hours **16**