

# Electronics Technology Certificate – ECTEEC45, 630E Requirements Effective Spring 2024 Program Planning Guide

**Program Description:** The Electronics Technology certificate program provides opportunities for students interested in the operation, maintenance, and repair of a wide array of electronics-based equipment with a broad foundation in electronics training. Instruction emphasizes a hands-on approach, use of sophisticated test equipment, and a solid base of information concerning computer hardware and software for technical applications.

This program offers job training directed toward immediate employment and future advancement with companies specializing in manufacturing or servicing all types of electronic equipment. Our graduates are preferred by industry employers and perform better in advanced training.

**Prerequisites**: Many classes have prerequisites. Prerequisites are those classes that prove eligibility for entry-level classes by testing or by having satisfied prior course work. Course work earned at other institutions must be unofficially evaluated or approved by a program advisor before registering. Courses in this certificate with prerequisites are marked with an asterisk (\*). See catalog for more information.

**Electronics Technology Certificate Prerequisites**: Placement into ENGL 097/098 or higher, placement into MATH 084 or higher or successful completion of equivalent class (or higher) and BUS 169 or equivalent computer experience.

Program Requirements				
Course Number	General Education/Related Instruction Requirements (15 credits)	Credit Hours		
EET 109* or	Mathematical Applications for Circuit Analysis (preferred) or	5		
MATH& 142*	Pre-Calculus 2	5		
ENGL& 101* or	Composition or	5		
ENGL& 235*	Technical Writing			
Human Relations	BUS 236 Interpersonal Communication in the Workplace (preferred) or	5		
Elective	any approved Human Relations course			
Course Number	Certificate Requirements (38 credits)			
EET 105	Introduction to Technology	2		
EET 106*	Introduction to Soldering	1		
EET 107* or	Choose one of the following:	5		
EET 108 or	EET 107 Introduction to Aviation Electronics			
EET 132* or	EET 108 Introduction to Fiber Optics			
EET 137* or	EET 132 IT Essentials – A+ Certification Advanced			
EET 138	EET 137 Introduction to Robotics			
	EET 138 Industrial Robotics			
EET 131	IT Essentials – A+ Certification	5		
EET 161*	D.C. Principles of Electronics	5		
EET 162*	A.C. Principles of Electronics	5		
EET 163*	Solid State Electronics	5		
EET 170*	Digital Electronics & PLCs I	5		
EET/EEL 203	Programmable Logic Controllers	5		
Total Credits:				
	(exclude)	ding prerequisites)		

**Note**: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

### **Program Outcomes**

- Identify and apply technical concepts and terms used in electronics.
- Install, analyze, and troubleshoot electronic systems.
- Use and configure computer hardware, operating systems, and basic networks.
- Use electronic circuit simulation software for circuit design and analysis.
- Locate, evaluate, and apply relevant information from various sources to address workplace problems.

### What Skills do I need to be successful in this field?

• http://www.onetonline.org/link/summary/49-2094.00

## What are some potential job titles?

- Electronics Technician
- Repair Technician
- Electrical and Instrument Mechanic

## Wages, employment trends and pathways

• http://www.onetonline.org/link/summary/49-2094.00#WagesEmployment

**Course Sequence:** This program of study is outlined by quarter, and courses should be taken in the indicated sequence. However, it should not be concluded that students will always proceed through their program of study exactly as prescribed here. The number of quarters listed here is minimal. Not all courses are offered every quarter. Individual student experiences, educational and training background, and personal schedules and demands all may affect the time it takes to finish this program. Summer quarter is included in the sequence below for this program.

<b>1<sup>st</sup> quarter</b> : EET 105, EET 109 or MATH& 142, EET 161					
<b>2<sup>nd</sup> quarter</b> : EET 162, EET 170, EET/EEL 203					
<b>3<sup>rd</sup> quarter</b> : EET 107 or EET 108 or EET 132 or EET 137 or EET 138, EET 163, ENGL&101					
4 <sup>th</sup> quarter: BUS 236 (or approved Human Relations elective), EET 106, EET 131					
Program Contact: Julie Lyderson-	-Jackson	206-934-4609	julie.lyderson@seattlecolleges.edu		
EET Coordinator: Charles Eckard	I	206-934-4588	charles.eckard@seattlecolleges.edu		
Electronics Department Website:	<u>onics</u>				
Program Website:	https://northseattle.edu/programs/electronics-technology-and-electronics- engineering				
NSC Advising: 206-934-3658	https://nort	hseattle.edu/advisin	<u>Ig</u>		