

**Program Description:** This certificate is intended for students who already have an Associates or Bachelor’s degree, or substantial professional experience, in an information technology related field.

The certificate prepares students for employment as electronic systems application or facilities engineers, security and field technicians, systems and sales consultants, technical support staff. Typical duties include installation, maintenance, and monitoring information technology systems and IT-controlled electronic systems such as security systems, entertainment systems, and HVAC systems.

**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 pre-requisites are marked with an asterisk (\*). See catalog for more information.

**IT Controlled Electronic Systems Certificate Prerequisites:** IT 101 or instructor permission

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

<b>Program Requirements</b>		
<b>Course Number</b>	<b>General Education/Related Instruction Requirements (10 credits)</b>	<b>Credit Hours</b>
BUS 118*	Project Management Introduction and Overview	5
BUS 236	Interpersonal Communication for the Workplace	5
<b>Course Number</b>	<b>Certificate Requirements (25-30 credits)</b>	
EET 131	IT Essentials – A+ Certification	5
EET 136	Introduction to Robots	5
EET 160 or EET 161	Introduction to Electricity and Electronics or D.C. Principles of Electronics	5
	<b>Microsoft Track</b>	
IT 122	Network Operating Systems 1	5
IT 126 *	Network Operating Systems 3	5
	<b>UNIX Track</b>	
IT 135	UNIX Operating System	5
IT 138*	UNIX for Network Administration	5
	<b>CISCO Track</b>	
IT 142	Network Management – CISCO I	5
IT 144*	Network Management – CISCO II	5
IT 146*	Network Management – CISCO III	5
		Total Credits: 35-40 (excluding pre-requisites)

## Program Outcomes:

- Understand technical concepts and terms used in the electronics and IT fields.
- Troubleshoot electronic systems, hardware, and network problems.
- Install, configure, and test networking devices, servers, workstations, electronic and electrical systems.
- Interact & communicate effectively with users and coworkers to identify network problems and needs for upgrades.
- Integrate IT and electronic systems.
- Locate, evaluate, and apply relevant information from various sources.

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

- <http://www.onetonline.org/link/summary/49-2098.00>

## What are some potential job titles?

- Security Systems Technician/Installer
- Fire Alarm Technician
- Electronic Systems Technician

## Wages, employment trends and pathways

- <http://www.onetonline.org/link/summary/49-2098.00#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. Also, in general, summer quarter is not considered one of the full-time quarters in the program.

**1<sup>st</sup> quarter:** BUS 236, EET 131, EET 136

**2<sup>nd</sup> quarter:** EET 160 or EET 161, IT 122 or IT 135 or IT 142

**3<sup>rd</sup> quarter:** BUS 118, IT 126 or IT 138 or IT 144

**4<sup>th</sup> quarter:** IT 146 (if needed)

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<b>NSC Advising Office:</b>		(206) 934-3658	<a href="https://northseattle.edu/advising">https://northseattle.edu/advising</a>
<b>Program Website:</b>	<a href="https://northseattle.edu/certificates/it-controlled-electronic-systems-certificate">https://northseattle.edu/certificates/it-controlled-electronic-systems-certificate</a>		