

Pathway: Industrial Power and Control Certificate Area of Study: **Skilled Trades and Technical Training**



This pathway meets the requirements for the Industrial Power & Control certificate. The program emphasizes a practical, hands-on approach to the field of industrial power and control and prepares students for a career as an electronics technician in this field. Completion of this certificate opens doors to a variety of careers in specialties including aerospace, manufacturing, avionics, and industrial automation and robotics in the commercial and government sectors.

Before Quarter One	Credits
☐ Pre-College Math or ABE (if	needed)
☐ Pre-College English, ABE or	· ESL (if needed)
☐ BUS 169 or equivalent com	puter experience
Quarter One (Fall)	
☐ EET 105	2
	H 081 or equivalent) or Math& 141
	th 2.5 or better or placement)5
☐ EET 161 (Prerequisite: MATI	H 081 or equivalent)5
Quarter Two (Winter)	
	H 084 or higher or EET 109)5
•	161 with 2.0 or higher and EET 109
	gher)5
☐ EET 202 (Prerequisite: EET 1	109 or MATH& 141 and EET 161)5
Quarter Three (Spring)	
•	109 or MATH& 141 or higher)5
	109 or MATH&141 and EET 162)5
☐ EET 163 (Prerequisite: EET 1	162)5
Quarter Four (Summer)	
☐ ENGL& 101 (Prerequisite: P	lacement)5
Quarter Five (Fall)	
	160 or EET 161)1
	163)5
☐ EET 203 (Corequisite: EET 1	61)5
Quarter Six (Winter)	
	109 or MATH& 141)5
	161)5
☐ BUS 236 or an approved Hu	uman Relations course5
	Total Credits Required: 73
Career Opportunities	
Technician in:	
1 Machatronics	5 Floctromochanical Systems

- Mechatronics
- 2. Industrial Maintenance 3. Industrial Automation
- and Control
- Electromechanical Systems
- 6. Aerospace Industries
- 7. Defense Industries
- 8. Laser industries

For current employment and wage estimates, please visit and search at www.bls.gov/oes."

Approximate Costs Each Quarter

Tuition & fees for:

WA state residents \$1,555,00 International students: \$3,297.95 Books, supplies, and miscellaneous fees \$475.00

Please note that these costs are estimates and may vary.

To Do List - A Guide to Help You Meet Your Goals

Before Quarter 1:
☐ Explore placement options: take the math and English placement
tests if needed.
\square Transfer previous college credits to North.
https://northseattle.edu/credentials
☐ Attend new student orientation.
Apply for financial aid and follow up on application with the

- ☐ Visit startnextguarter.org to find out if Workforce Education funding is available for you.
- ☐ Contact the Electronics program navigator for an informational meeting to confirm your pathway.
- Explore Prior Learning Assessment (PLA) options if you have significant professional industry training.

Quarter 1 (Fall)

financial aid office.

- ☐ Schedule an appointment with your assigned advisor in Starfish (bit.ly/Starfishlogin) to meet and discuss your goals.
- ☐ Drop by the Library (https://libguides.northseattle.edu/welcome) to get help with research; check out resources; access computers and study space; and create media projects.
- ☐ Explore electronics disciplines in industry in EET 105 to confirm career choice.
- ☐ Form study groups with classmates and learn about tutoring options at the Student Learning Center.
- ☐ View employment opportunities in EET News on Canvas quarterly.

Quarter 2 (Winter)

- ☐ Create an educational plan with your assigned advisor or Electronics program navigator.
- ☐ Apply for financial aid for the upcoming academic year in Winter or Spring quarter to maximize your funding options.
- ☐ Apply for the Seattle Colleges Foundation Scholarship and other scholarships.
- ☐ Explore internship options with Electronics program navigator.
- ☐ Check out campus life: student clubs, Equity & Welcome Center, Fall Fest, etc.

Quarter 3 (Spring)

- ☐ Attend on campus and virtual career fairs and employer presentations.
- ☐ Verify academic progress in Degree Audit (https://northseattle.edu/ online-services/degree-audit).
- ☐ Apply for Summer Financial Aid.
- ☐ If unable to take Summer classes, meet with your assigned advisor or Electronics program navigator to update your educational plan.

Quarter 5 (Fall)

- ☐ Attend resume and interview prep workshops and explore job finding resources through OCE&E.
- ☐ Create a LinkedIn profile and professional email address, and clean up your online presence.
- ☐ Apply for graduation for the Industrial Power & Control Certificate.

Quarter 6 (Winter)

- ☐ Add your classmates on LinkedIn to grow your network and keep in touch.
- ☐ Update your resume.
- ☐ Join alumni association.

Industrial Power and Control Certificate



Apply for Financial Aid and Other Funding

All students in need should apply for financial aid. Don't assume you are not eligible. Visit https://northseattle.edu/financial-aid to learn more about the application steps and types of financial aid available, including grants and scholarships you don't have to pay back.

Some students may be eligible for Workforce Education tuition assistance programs depending on program of study, family income and family size, DSHS assistance, unemployment/ employment status of self or spouse, or veteran status. Take this short survey to find out if you pre-qualify for funding at: www.StartNextQuarter.org.

Which quarter can I begin?

Any

Length of Program

73 credits, or 6 quarters at 5-15 credits per quarter.

Class Times/Delivery Format?

North offers courses on-campus in the day time, evenings, online, and hybrid (part on-campus, part online). Most classes meet twice per week (Monday/Wednesday or Tuesday/Thursday) or once per week throughout the quarter.

Find Out More

For general questions, please contact Julie Lyderson, Electronics Program Navigator, at Julie.Lyderson@seattlecolleges.edu or (206) 934-4609 or a Skilled Trades and Technical Training advisor at advisornorth@seattlecolleges.edu (206) 934-3658. For questions related to specific courses, email the instructor of the course.

Related Degrees and Certificates

North Seattle College is poised to meet the growing demand for highly skilled technicians with the most in-depth electronics program of any community or technical college in King County. North offers certificates and degrees in a wide range of specialty fields:

Electronics Technology AAS Degree

Provides opportunities for students interested in the operation, maintenance and repair of a wide array of electronics-based equipment. Program emphasizes a hands-on approach, use of test equipment and a solid base of information concerning computer hardware and software for technical applications.

Electronics Technology Certificate

Prepares students for employment with companies specializing in manufacturing and servicing all types of electronic equipment. North Seattle College graduates are preferred by industry employers and perform well in advanced training.

Electronics Engineering Technology Associate of Applied Science-Transfer (AAS-T) Degree

Emphasizes calculus-based math and physics. This degree is intended for those wishing to transfer to the Electronics Engineering Technology Bachelor of Applied Science (BAS) program offered by Central Washington University. Students intending to enter the workforce and potentially continue their education toward an Electronics Engineering Technology bachelor's degree may consider this option.

Aviation Electronics I: Wire Assembly Certificate

Provides students with the basic knowledge, skills, and abilities to meet requirements for employment as an entry-level wire assembly technician in aerospace-related industries.

Aviation Electronics II: Electronics Technician Certificate

Provides students with the basic knowledge, skills, and abilities to meet minimum requirements for employment as an entry-level electronics technician in aerospace-related technologies.

Avionics Technician Certificate

Provides students with the basic knowledge, skills, and abilities to meet minimum requirements for employment as an entry-level avionics technician in aerospace-related industries. Intended as a supplement for aviation maintenance technicians.

Healthcare Technology Management/Biomedical Equipment Technician (HTM/BMET) AAS Degree

Provides specialized training needed to install, calibrate, service, repair, and modify patient monitoring and diagnostic equipment. Coursework includes electronics technology, chemistry, human anatomy and physiology, medical terminology, and preparation specific to employment in hospitals, medical equipment manufacturing, and field service engineering.

Industrial Power and Control AAS Degree

Prepares students for employment with organizations that design, manufacture, service, sell, or support electrical and electronic systems that control machinery, automation and/or processes.

Mechatronics AAS Degree

Prepares students for employment with organizations that design, manufacture, service, sell, and support electromechanical and robotic systems that control machinery, automation, and processes. Offered in partnership with Shoreline Community College (SCC) and requires enrollment at both SCC and North Seattle College.

Industrial Automation and Electronic Controls Certificate

Prepares students for employment with organizations that design, manufacture, service, sell, and support electrical and electronic systems that control machinery, automation, and processes.

IT Controlled Electronic Systems AAS Degree (offered by the IT Department)

Provides skills needed to install, maintain, and monitor information technology systems and IT-controlled electronic systems including security and entertainment systems.

IT Controlled Electronic Systems Certificate (offered by the IT Department)

Provides skills needed to install, maintain, and monitor information technology systems and IT-controlled electronic systems including security and entertainment systems.

Associate of Science Option II Degree, with an Emphasis in Engineering (Not an EET Program)

Provides a deeper theoretical foundation in engineering fundamentals. Intended for students who wish to transfer to an engineering bachelor's degree program.

Please see an advisor or the electronics navigator to determine which path is right for you.

North Seattle College is committed to the concept and practice of equal opportunity and reasonable accommodation for all its students, employees, and applicants in education, employment, services, and contracts. For our full non-discrimination statement, visit www.seattlecolleges.edu/nds.