NORTH SEATTLE Pathway: Industrial Automation and Electronic Controls Certificate COLLEGE Area of Study: Skilled Trades and Technical Training



This pathway meets requirements for the Certificate in Industrial Automation and Electronic Controls. This sample schedule assumes a fall start and includes summer quarters. If you wish to take alternate courses not listed below, consult a North Seattle College advisor to confirm you still meet certificate requirements.

Before Quarter One

Credits

□ Pre-College English, ABE, or ESL (if needed)

Quarter One (Fall)

EET 109 (Prerequisite: MATH 081 or equivalent)	5
□ EET 131	
EET 161 (Prerequisite: MATH 081 or equivalent)	
Quarter Two (Winter)	
EET 202 (Prerequisite: EET 161 and EET 109 or MATH& 141)	5
EET 137 (Prerequisite: MATH 084 or higher or EET 109)	5
EET 160 (Prerequisite: EET 109 or MATH& 141 or higher)	5
EET 106 (Prerequisite: EET 160 or EET 161)	1
Quarter Three (Spring)	
EET 112 (Prerequisite: EET 109 or MATH& 141 or higher)	5
EET 138 (Placement into MATH 084 or higher or EET 109)	5
EET 201 (Prerequisite: EET 109 or MATH&141 and EET 162)	5
Quarter Four (Fall)	
□ BUS 236 or an approved Human Relations course	5
ENGL& 101 (Prerequisite: Placement)	5
EET 203 (Corequisite: EET 161)	

Total Credits Required: 61

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.
- □ Transfer previous college credits to North. https://northseattle.edu/credentials
- □ Attend new student orientation.
- □ Apply for financial aid for the upcoming academic year in Winter or Spring quarter to maximize your funding options.
- □ Visit startnextquarter.org to find out if Workforce Education funding is available for you.
- □ Explore Prior Learning Assessment (PLA) options if you have significant professional industry training.
- □ Meet with Electronics program navigator.

Quarter 1 (Fall)

- □ 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.
- □ Form study groups with classmates and learn about tutoring options at the Student Learning Center.
- □ View employment opportunities in EET News on Canvas quarterly.
- □ Check out campus life: student clubs, Equity & Welcome Center, Fall Fest, etc.

Quarter 2 (Winter)

- □ Create an educational plan with your assigned advisor or Electronics program navigator.
- Explore internship options, including Boeing Summer Facilities Internship. If you intend to complete the Mechatronics AAS, discuss for-credit internship requirements and coursework options in lieu of internship.
- □ 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.

Quarter 3 (Spring)

- □ Attend on campus and virtual career fairs and employer presentations.
- □ Apply for Summer Financial Aid.
- □ Attend resume and interview prep workshops and explore job finding resources through OCE&E.
- Verify academic progress in Degree Audit (https://northseattle.edu/ online-services/degree-audit).
- □ Ensure all Academic Exception paperwork is submitted (such as course substitutions, transfer credit, and PLA), as needed.

Summer

- □ Apply for graduation for the Industrial Automation & Electronic Controls Certificate.
- □ Create a LinkedIn profile and professional email address, and clean up your online presence.

Quarter 4 (Fall)

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



Career Opportunities

This program prepares students for an entry-level position in aerospace manufacturing, avionics, and related fields.

- Technician in:
- 1. Biomedical
- 2. Industrial Maintenance
- 3. Industrial Automation
- 4. Robotics
- 5. Aerospace Manufacturing
- 7. Defense Contractors
 8. Metrology (Calibration)
- 9. Fiber Optics
- 10. Telecommunications
- 11. Laser Industries

6. Avionics

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	\$3,297.75
Books, supplies, and miscellaneous fees	\$475.00

Please note that these costs are estimates and may vary.

Apply for Financial Aid and Other Funding

All students in need should apply for financial aid. Don't assume you are not eligible. Visit <u>https://northseattle.edu/financial-aid</u> 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

61 credits = 4 quarters if you take 15 or more credits each term.

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, (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 course instructor.

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 industries.

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 to the Airframe and Powerplant (A&P) license 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, and support electrical and electronic systems that control machinery, automation, and processes.



Related Degrees and Certificates (continued)

Industrial Power and Control Certificate

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

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.