

## Pathway: Industrial Engineering and Material Science

### Area of Study: Science, Technology, Engineering, and Math



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#### Overview

This pathway meets requirements for the Associate of Science Track 2 (AS Track 2) degree with a concentration in Industrial and Material Science Engineering. (Read program QR code to see more)

#### Estimated Length of Completion

Degree: Associate of Science - Transfer, Track 2 (PHST2AS)

7 quarters, Full time

#### Career Opportunities

An industrial and Material Science Engineering pathway can lead to various career opportunities. Examples include:

Industrial Engineering:

- Operation Research
- Systems Engineering
- Manufacturing
- Production
- Supply Chain
- Management Science
- Financial Engineering
- Ergonomics
- Human Factors Engineering
- Safety E ...(Read program QR code to see more)



#### Future Education

Once you complete this associates degree, additional education opportunities include, but are not limited to:

- A Bachelor's degree in Engineering, or a related field at a four-year college or university.

North Seattle College has direct transfer agreements with four-year institutions throughout Washington state, including the University of Washington, Washington State University, and Seattle University. Graduates from North have also transferred to out-of-state institutions.

Program and admissions requirements vary from college-to-college. Contact a North advisor to create an educational plan tailored to transfer to the institution of your choice.



Scan QR code to learn more about this program.

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#### Get Started

**Step 1:** Apply and register at North Seattle College anytime (the application is always free). Once you become a student, register for classes using the online class schedule and go to the academic calendar for registration dates and tuition deadlines.

**Step 2:** See an advisor to create a personalized educational plan by the end of your second quarter. Your plan will include prerequisites, graduation requirements, and transfer preparation if you plan to transfer to another college or university to earn a bachelor's degree.

#### Tuition and Fees

Learn more about the [estimated cost of attendance and general fees to attend college](#).

#### Financial Aid and Funding Resources

It's time to apply for Financial Aid for next year by completing either the [FAFSA](#) or the [WASFA](#) 2024-25.

#### Need help paying for college?

To apply for financial aid, including grants and scholarships you don't have to pay back, visit [North's Financial Aid Department](#) for details. Part-time and full-time students can qualify for financial aid funds.

#### Program Contact

**Program Coordinator**

[Jae Hyeuk Suk](#)  
[email](#)

(206) 934-4586

#### Advising Contact

Contact the [Science, Technology, Engineering and Mathematics Area of Study advisor](#).

206-934-3658



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#### Before Quarter One

- [Pre-College or Transitional Studies Math](#) (if needed)
- [Pre-College or Transitional Studies English](#) (if needed)
- Take CHEM&139 General Chemistry Prep as a prerequisite to CHEM&161 General Chemistry with Lab I or [take the chemistry placement exam](#).
- PHYS&114 General Physics w/ Lab or high school physics, if needed.
- [Explore placement options](#): take the [math](#) and [English](#) placement tool if needed.
- Make an informed choice on the [number of units to take each quarter](#).
- F-1 international students must enroll full time (12+ units) each quarter and check in with the [International Programs office](#) before the start of the quarter if enrolling in less than 12 units and/or before starting any work or volunteer experience.
- Apply for [Financial Aid](#) and other funding before your first quarter. Visit the [Financial Aid Office](#) to explore how to pay for college.
- [Transfer previous college credits](#) to North if applicable.
- Attend [New Student Orientation](#).
- Visit potential transfer universities and meeting Engineering transfer advisors.
- If you need academic accommodations for a documented disability, please contact [Disability Services](#).

A sample schedule and quarterly to-do list are below. The schedule and to-do list will help you explore courses and complete tasks on time. The guide assumes a fall quarter start, but you can begin in any quarter.

#### Sample Schedule

This is an example of a quarterly schedule:

##### Quarter 1

- ENGL&101 English Composition I (5 units)
- MATH&151 Calculus I (5 units)
- Individuals/Cultures/Societies (5 units)

##### Quarter 2

- CHEM&161 General Chem W/Lab I (6 units)
- MATH&152 Calculus II (5 units)
- PHYS&221 Engineering Physics I (5 units)

##### Quarter 3

- CHEM&162 General Chem W/Lab II (6 units)
- MATH&163 Calculus 3 (5 units)
- PHYS&222 Engineering Physics II (5 units)

##### Quarter 4

- MATH238 Differential Equations (5 units)
- Visual, Literary and Perf Arts (5 units)

##### Quarter 5

- CSC110 Intro to Cmptr Progming (5 units)
- ENGR&214 Statics (5 units)
- PHYS&223 Engineering Physics III (5 units)

##### Quarter 6

- ENGR&215 Dynamics (5 units)
- CSC 142 Computer Programming I or ENGR 240 Intro Numerical Methods (5 units)
- MATH220 Linear Algebra (5 units)

##### Quarter 7

- ENGR&225 Mechanics of Materials (5 units)
- ENGR&224 Thermodynamics (5 units)
- Individuals/Cultures/Societies or Visual, Literary and Perf Arts (5 units)



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#### Sample Quarterly To-Do List

This is an example of a quarterly to-do list:

##### Quarter 1

- Schedule an appointment with your assigned advisor in [Starfish](#) to meet and discuss your goals. Learn more about Starfish [here](#).
- Explore careers and majors through workshops, [counseling](#) and [career services](#).
- Come to the [Library](#) to get help with research; check out resources; access computers and study space; and create media projects.
- Visit the [Student Learning Center](#) to learn about tutoring services offered in-person and online.
- Check out [campus life: Student Clubs and Affinity Groups](#), [TRIO](#), [Equity & Welcome Center](#), [Wellness Center](#), etc.
- Apply to [LSAMP](#).

##### Quarter 2

- Create an [educational plan](#) with your [assigned advisor](#).
- Apply for [financial aid](#) for the upcoming academic year in Winter or Spring quarter to maximize your funding options.
- Research and develop a list of four-year colleges and universities.
- Attend [transfer events](#) at North and universities of interest.
- Visit [North's Transfer webpage](#) for transfer information.

##### Quarter 3

- Update your educational plan with your assigned advisor.
- Apply for the [Seattle Colleges Foundation Scholarship](#) and [other scholarships](#).
- Consider [Student Leadership positions](#) and other [on-campus jobs](#).
- Attend "Making Learning and Teaching Visible" campus event every spring.
- Apply for Summer financial aid.

##### Quarter 4

- Visit potential universities and determine application deadlines.

##### Quarter 5

- Update your educational plan with your assigned advisor.
- Contact Engineering department at potential universities.
- Attend transfer workshops and a transfer fair.
- Write your personal statement for university applications.

##### Quarter 6

- Apply for [financial aid](#) for the upcoming academic year in Winter or Spring quarter to maximize your funding options.
- [Apply](#) for the [Associate of Science - Transfer, Track 2 \(AS-Track 2\)](#) degree in ctcLink. Check with your assigned advisor to be sure you are meeting degree requirements.
- Apply to universities and colleges and scholarships.
- Explore possible Engineering internships.



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