

# UNIVERSITY OF WASHINGTON Pre-Engineering Transfer Information

This handout includes admission requirements to the University of Washington, information about the UW Engineering program admission requirements and courses at North Seattle College that will transfer to the College of Engineering. Pre-Engineering students are encouraged to contact:

#### **Undergrad Engineering Advising Team, 014 Loew Hall**

- For general questions: <a href="mailto:engradv@uw.edu">engradv@uw.edu</a>
- For questions or to set up an appointment: (206) 543-1770
- Attend a Transfer Thursday information session: <a href="https://transfer.uw.edu/thursday/">https://transfer.uw.edu/thursday/</a>
- Prospective Transfer Student Information, including departmental drop in sessions: https://www.engr.washington.edu/admission/transfer

# **Transfer Application Deadlines**

To become an engineering student at the University of Washington, applicants must apply and be admitted to **both** the University of Washington **AND** an Engineering Department (Engr Dept). The University application deadlines are sooner than the College of Engineering application deadlines. Applicants need to apply to Engineering Department before they hear back from UW admissions about their acceptance to UW. UW Admission website: <a href="http://admit.washington.edu/apply/transfer/">http://admit.washington.edu/apply/transfer/</a>

#### **Application deadlines**

Start Quarter	UW	Engr Dept	Majors admitting during the quarter
Autumn	Feb 15	Apr 5	Aeronautics & Astronautics Bioresource Science & Engr Civil Engr Computer Engr Electrical Engr Environmental Engr Human Centered Design & Engr Industrial & Systems Engr Materials Science & Engr Mechanical Engr
Spring^	Dec 15	Jan 15	Bioengineering Bioresource Science & Engr Chemical Engr Computer Engr Human Centered Design & Engr

^International transfer students are only admitted for Autumn quarter, <u>UNLESS</u> they are already in the US and meet department admission requirements for Bioengineering or Chemical Engineering.

#### **College Academic Distribution Requirements (CADR)**

CADR are admission requirements and must be satisfactorily completed before the first quarter of enrollment at UW. Students deficient in any required high school courses must take courses in college. For more information, please go to: http://admit.washington.edu/apply/transfer/cadr/

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# **Pre-Engineering Courses currently offered at NSC**

Courses at NSC	Title at NSC	Transfer to UW as				
BIOL &211, 212, 213 (5, 5, 5)	Majors Cellular, Majors Animal, Majors Plant	BIOL 180, 200, 220 (5, 5, 5) if all three courses taken; otherwise, BIOL 2XX				
CHEM &161 (6)	General Chem. w/ Lab 1	CHEM 142 (5), 1XX (1)				
CHEM &162, 163 (6,6)	General Chem. w/ Lab 2, General Chem. w/ Lab 3	CHEM 152, 162 (5,5), 1XX (2) if both courses taken; otherwise CHEM 1XX*				
CHEM &241 (4)	Organic Chem. 1	CHEM 237 (4)				
CHEM &242 (4)	Organic Chem. 2	CHEM 238 (4)				
CSC 142 (5)	Computer programming 1	CSE 142 (4), 1XX (1)				
CSC 143 (5)	Computer programming 2	CSE 143 (5)				
ENGL &101 (5)	English Composition 1	ENGL 131 (5)				
ENGL &235 (5)	Technical Writing	ENGR 231 (3), 2XX (2)				
ENGR &204 (5)	Electrical Circuits	EE 215 (4), 2XX (1)				
ENGR &214 (5)	Statics	AA 210 (4), 2XX (1)				
ENGR &215(5)	Dynamics	ME 230 (4), 2XX (1)				
ENGR &224 (5)	Thermodynamics	AA 260 (4), 2XX (1)				
ENGR &225 (5)	Mechanics of Materials	CEE 220 (4), 2XX (1)				
ENGR 240 (5)	Intro. to Numerical Methods	AMATH 301 (4), 2XX (1)				
MATH &151 (5)	Calculus 1	MATH 124 (5)				
MATH &152 (5)	Calculus 2	MATH 125 (5)				
MATH &163 (5)	Calculus 3	MATH 126 (5)				
MATH 220 (5)	Linear Algebra	MATH 208 (3), 2XX (2)				
MATH 224 (5)	Vector Calculus	MATH 224 (3), 2XX (2)				
MATH 238 (5)	Differential Equations	MATH 207 (3), 2XX (2)				
MSC 101 (5)	Intro. to Materials Science	MSE 170 (4), 1XX (1)				
PHYS &221 (5)	Engineering Physics 1	PHY 121 (5)				
PHYS &222 (5)	Engineering Physics 2	PHY 122 (5)				
PHYS &223 (5)	Engineering Physics 3	PHY 123 (5)				

<sup>\*</sup>While CHEM&162 (without CHEM&163) will transfer to UW as Chemistry 1XX, students who complete both CHEM&161 and CHEM&162 at a Washington State Community College (including NSC) will satisfy the admission and graduation requirements for the CivE, EnvE, ISE, MSE and ME departments. For more information, please got: <a href="https://www.engr.washington.edu/admission/transfer">https://www.engr.washington.edu/admission/transfer</a>

# Minimum college level credits requirements:

Most of the engineering departments have a minimum college level credits requirement either before the University or the departmental application deadlines. For more information, please go to the Academic Planning Worksheets or the department's website.

### **Program abbreviations:**

A&A BioE ChemE CivE CompE	Aeronautics & Astronautics Bioengineering Chemical Engineering Civil Engineering Computer Engineering
EE	Computer Engineering Electrical Engineering

Environmental Engineering Industrial & Systems Engineering Mechanical Engineering Materials Science & Engineering Bioresource Science and Engineering
Human Centered Design & Engineering

# University of Washington Engineering Departmental Admission Requirements (Courses offered at NSC)

The following is a summary of the courses offered at NSC required for application to Engineering programs. Science sequences should be completed at the same college or the sequence may not count upon transfer. Always verify prerequisite coursework, as it is subject to change.

Subjects	A&A	Bio E	Chem E <sup>+</sup>	Civ E	CompE <sup>++</sup>	EE	Env E	ISE	ME	MSE	BSE <sup>+++</sup>
Mathematics											
MATH &151,	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α
&152, &163											
MATH 220	E		В	E			R	R	R	R	
MATH 224	E*										
MATH 238	E	R*	Α	R		E	E	R	R	E	R
Natural Science											
BIOL		E-1					E-2				
CHEM &161	Α	Α	Α	Α		Α	Α	Α	Α	Α	Α
CHEM &162		Α	Α	R			Α	E	E	Α	Α
CHEM &163		Α	Α				E			R	Α
CHEM &241		E	В								R
CHEM &242			В								R
PHYS &221	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α
PHYS &222	Α	E	Α	Α		Α	Α	Α	Α	Α	R
PHYS &223	E	С	В	R		E	E	E	E	R	R
Written and Oral	Communic	ation									
ENGL &101	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α
ENGL &235										R	R
<b>Engineering Funda</b>	amentals										
ENGR 240	E*	E	B*	E**			E**		R	E**	
CSC 142			B*	E**	Α		E**	R		E**	
CSC 143					Α						
MSC 101^								R	R	E-3	
ENGR &204								R	R		
ENGR &214	Α			Α			Α	Α	Α	R	
ENGR &215	E			E				E***	E		
ENGR &225	E			E			E	E***	E	R	
ENGR&224	E						E				R

- A: Application Requirements Must be completed by the departmental application deadline.
- E: Enrollment Requirements Must be completed by the start of the first quarter in the major.
- E\*: One of these courses may be taken in the first quarter in the program (Fall quarter).
- E\*\*: Either ENGR240 or CSC142 is required before enrollment in the department. CivE and EnvE prefer ENGR240.
- E\*\*\*: While either ENGR&215 or ENGR&225 is required before enrollment in the department, it is highly recommended to complete both before enrollment in the department.
- E-1: It is highly recommended to complete BIOL&211, BIOL&212, and 213 before enrollment in the department. Students who are not planning to complete all these courses are encouraged to contact the BioE department before applying to the major.
- E-2: A BIOL course required before enrollment in the department. Please contact the EnvE department to identify an appropriate BIOL course.
- E-3: Applicants without MSC101 completed are eligible to apply, but will be required to complete it in the first quarter in the program.
- R: Strongly recommended to complete before enrollment into the department. ME also recommends ME123 and INDE315, but these classes are not offered at NSC.
- R\*: Strongly recommended to have completed or in progress at the time of application.
- B: Must be completed BEFORE the start of the Fall quarter following admission.
- B\*: Either ENGR 240 or CSC 142 must be completed BEFORE the start of the Fall quarter following admission.
- C: For pre-med students PHYS&223 is recommended to complete before enrollment in the department.
- +: Chem E only: Up to two application requirements may be in progress at the time of application.
- ++: CompE only: Complete as many enrollment requirements as possible by the time of application to be a strong candidate.
- +++: BSE only: BES also requires ECON&201 (offered at NSC) and an intro Probability & Statistics (not offered at NSC).
- ^: MSC101 (Intro. To Materials Science) is not currently offered at NSC.

#### **Human Centered Design & Engineering (HCDE)**

These are Application Requirements. All courses must be completed by the departmental application deadline.

- MATH&142 and 151, or two courses from MATH&151, &152, &163
- MATH&146 or MATH211
- Three courses from CHEM&161, 162, 163, PHYS&114 or PHYS&221, PHYS&115 or PHYS&222, PHYS&116 or PHYS&223, BIOL&211, 212, 213, BIOL128 or BIOL&241, PSYC222
- ENGL&101
- CSC142

## Other useful websites and contact information

#### Course equivalency guide

https://admit.washington.edu/apply/transfer/equivalency-guide/

Engineering transfer student admission, departmental transfer Thursday drop in sessions, and more <a href="https://www.engr.washington.edu/admission/transfer">https://www.engr.washington.edu/admission/transfer</a>

**Engineering Department overviews and contact information** 

https://www.engr.washington.edu/departments/inbrief

**Minority Scholars Engineering Program (MSEP)** 

https://www.engr.washington.edu/current/studentprogs/msep

Women in Science & Engineering (WiSE)

https://www.engr.washington.edu/current/studentprogs/wise

Always verify information, as it is subject to change.

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