

## Focus on Engineering Student Success

Highline has a long-standing, successful engineering program designed to mirror the freshman and sophomore years of a university engineering degree. Highline also has two National Science Foundation grant programs just for engineering students working on the Associate of Science transfer degree.

### Northwest Engineering Talent Expansion Partnership (NW-ETEP)

NW-ETEP is a National Science Foundation project designed to help you succeed in engineering. The project involves other colleges and universities in Washington and reaches into the engineering community to connect you with your future career.

*NW-ETEP benefits and opportunities include:*

- Organized student groups and field trips
- Special student support staff dedicated to your success
- Tutoring, mentoring and job shadowing

### Engineering Scholars Program (ESP)

Scholarships totaling \$100,000 per year are available for students pursuing an AS Degree in Engineering. If you've done well academically and have a financial need, the ESP program can grant you up to \$1,042 each quarter for tuition, fees and related educational expenses, including books. These scholarships are available only to engineering students and are made possible through a National Science Foundation grant.

### Transferring to Four-Year Colleges and Universities

It is critical to plan your education carefully with the help of an adviser. Contact a Highline Community College adviser to develop a class plan and ensure that you are meeting all requirements.

## Applying to Highline

For information on applying to Highline Community College or to receive an admissions packet, please contact:

### Admissions/Entry Services

(206) 878-3710, ext. 3181  
TDD: (206) 870-4853  
[www.highline.edu](http://www.highline.edu)

Highline Community College  
Engineering, MS 29  
P.O. Box 98000  
Des Moines, WA 98198-9800

*Located at S. 240th Street and Pacific Highway S.*

## Tuition & Fees

Tuition is set by the State Board for Community and Technical Colleges, as set forth by the Washington State Legislature, and is subject to change. Tuition is charged per credit; see the Highline Web site—[www.highline.edu](http://www.highline.edu)—for current rates. There are additional costs for books, supplies and lab fees.

**HIGHLINE**  
COMMUNITY COLLEGE  
[www.highline.edu](http://www.highline.edu)

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# Engineering Associate of Science

*A Transfer Degree to Four-Year Institutions*

**College Transfer**

**HIGHLINE**  
COMMUNITY COLLEGE

*Student centered. CAREER FOCUSED.*

## A Smart Start to Your Bachelor's Degree

### Complete the first two years of a four-year engineering degree at Highline

Did you know that you can complete the first two years of a bachelor's degree in engineering at Highline Community College?

Earn an Associate of Science (AS) degree when you complete this program with a cumulative grade point average of at least 2.0 and a minimum of 90 credits. Then, you'll transfer to a college or university engineering program to finish your baccalaureate degree.

### Excellent Faculty, Smaller Class Size

Learn from highly educated faculty, dedicated to students. Smaller class size, averaging about 25 people, means more opportunities to ask questions and interact with instructors.

### Lower Tuition, Scholarships

Highline's tuition is about one-third that of most four-year public institutions. It's a fact that transfer students save over \$5,000 each year by taking lower division coursework at a community college. Plus, we have special **scholarships available** just for engineering students through our Engineering Scholars Program.

### Targeted Support

Tutoring, study groups, and a variety of extracurricular activities will prepare you for a career in engineering. The Northwest Engineering Talent Expansion Partnership (NW-ETEP) exists for one thing: to help you succeed as an engineering student.

### Transfer is a Recognized Degree Path

About one-third of students earning bachelor's degrees in engineering in Washington start at community colleges and fully one-half of the bachelor's degrees granted at the University of Washington each year are awarded to transfer students. It's a smart, economical way to begin your bachelor's degree in engineering.

## Completing an Associate of Science Degree in Engineering

### Here are a few things to keep in mind about the Engineering Transfer Program:

- Students entering the program without adequate high school or other academic preparation will need to complete prerequisite courses before enrolling in the required courses.
- Although some of the courses are offered during evening hours, it will be necessary to attend day classes to complete the degree.
- Since many of the required courses are offered only once each year, careful educational planning is essential.

## Contact an Engineering Adviser today

Call or email an adviser or visit them in Building 29 on the Highline Community College main campus:

Bob Embrey  
(206) 878-3710, ext. 3972  
rembre@highline.edu

Rich Bankhead  
(206) 878-3710, ext. 4315  
rbankea@highline.edu

<http://flightline.highline.edu/engineering>

## Associate of Science Degree

### Engineering Requirements

Course Number	Course Title	Credits
MATH 124	Calculus I	5
MATH 125	Calculus II	5
MATH 126	Calculus III	5
PHYS 201	Mechanics	5
PHYS 202	Electricity/Magnetism	5
PHYS 203	Modern Physics	5
WRIT 101	Principles of Writing	5
CHEM 151	General Chemistry I	5
CSCI 142	Obj-Orient Prog I Java	5
*	Humanities elective	5
*	Social Science elective	5
*	Humanities or Social Science elective	5

\* Recommended electives: Humanities: SPCH 100; Social Science: ECON 211 and ECON 212

### Additional Required Courses

A minimum of 31 credit hours must be taken from the following list. Students do not need to take all of the courses on the list. Particular course requirements depend on institution and specific major. All students should take ENGR 100 as early as possible during their first year.

Course Number	Course Title	Credits
*ENGR 100	Orientation for Engr Careers	1
ENGR 123	Engineering Graphics	5
ENGR 124or126	Computer-Aided Drafting	5
ENGR 210	Statics	5
ENGR 215	Fundamentals of Elect Engr	5
ENGR 220	Mechanics of Materials	5
ENGR 230	Dynamics	5
ENGR 260	Thermodynamics	5
MATH 220	Linear Algebra	5
MATH 225	Calculus IV	5
MATH 230	Differential Equations	5
CHEM 152	General Chemistry II	5
CHEM 153	General Chemistry III	5
CHEM 201/204	Organic Chem I/Chem Lab I	5
CHEM 202/205	Organic Chem II/Chem Lab II	5
WRIT 143	Intro to Technical Writing	5
BIOL 201	Cell Biology	5
BIOL 202	Animal Biology	5
CSCI 143	Obj-Orient Prog II Java	5
CSCI 151	Expl Comp Science C++	5
CSCI 152	Data Structures with C++ and .NET	5

\* Recommended in your first quarter.