Engineering Transfer Courses at NSC

You can take university-level engineering courses at North Seattle College. See reverse side for planning your transfer courses at NSC. In the annual schedule below, * means that the course is offered on an as-needed basis.

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<th>Annual ENGR Schedule</th>
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**ENGR 110 - Engineering Orientation** (2 credits) - Learn about various branches of engineering and their academic and professional requirements. Participate in group design projects. Plan your academic career. No prerequisites.

**ENGR& 214 - Engineering Statics** Newton's law, force vectors, equilibrium analysis. Two- and three- dimensional structures; trusses, beams, and friction. Vector algebra used throughout the course. MATH 152 and PHYS 221

**ENGR& 225- Mechanics of Materials** Stress and strain in solids. Load analysis and the stresses and deflections of various elements under tension, compression, torsion, bending and shear forces. Deflection of beams. Prereqs: ENGR& 214

**ENGR& 215 - Engineering Dynamics** Study various types of motion using various coordinate systems. Equations of motion; Work and potential energy; impulse and linear momentum. Angular momentum. Prereqs: ENGR& 214

**ENGR& 240 - Introduction to Electrical Engineering** Basic linear circuits, components, and systems concepts. Solution of differential equations of basic circuit forms. Steady state sinusoidal analysis. Prereqs: MATH& 152 and PHYS& 222

**ENGR 240 – Introduction to Numerical Methods** Numerical solutions to engineering problems using modern scientific computing tools. Introduction to MATLAB programming for numerical computation. Prereq: MATH& 152 and CSC 110

For further information contact **Dennis Schaffer, Engineering Coordinator**
Office: IB2430A, 934-4586 dennis.schaffer@seattlecolleges.edu 05/24/16
Engineering Transfer Courses at NSC

Planning for an ENGINEERING major?

Engineering classes at NSC are offered only one or two times per year:

- ENGR& 214, Engineering Statics, is offered FALL QUARTER only.
- ENGR& 225, Mechanics of Materials, is offered WINTER QUARTER.
- ENGR 240, Introduction to Numerical Methods, is offered WINTER QUARTER only.
- ENGR& 215, Dynamics, is offered SPRING QUARTER only.
- ENGR& 204, Electrical Circuits, is offered SPRING QUARTER only.

Courses with * means that they are offered on an as-needed basis.

It’s important to plan well in advance to ensure that you have completed all prerequisites before enrolling. In the following diagram, arrows represent prerequisite relationships.

Important notes:

- Be sure to complete MATH& 152 (Calculus II) and PHYS& 221 (Engineering Physics I) before Fall Quarter of the year in which you wish to take Engineering Statics.

- Check the prerequisites for all classes you will be taking well in advance, and plan a schedule that fits courses in the proper sequence
- See reverse side for engineering course descriptions
- CSC 142 and CSC 143, Computer Programming I and II, are offered every quarter

The Seattle Colleges do not discriminate on the basis of race or ethnicity, color, age, national origin, religion, marital status, sex, gender, sexual orientation, gender identity, veteran or disabled veteran status, political affiliation or belief, citizenship/status as a lawfully admitted immigrant, or disability.

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