

# Seattle Central Community College

## Suggested Courses for Pre-engineering Majors (AST2) For Transfer to Washington State University, Pullman Campus

Sections in this document refer to sections of the AST2 degree program found at:

<http://www.sbctc.edu/college/e-transferassocinscience.aspx>

*Note: Please consult with an academic advisor to determine which of the following courses are appropriate for AST2 degree completion in your particular area of interest.*

### **Core Courses required for AST2:**

#### **A. Communication Skills**

ENGL& 101                  English Composition I

#### **B. Mathematics**

MATH& 151                  Calculus I

MATH& 152                  Calculus II

#### **C. Humanities and Social Science**

ECON& 202                  Macro Economics

ANTH& 100                  Survey of Anthropology

Humanities Elective [HA]

#### **D. Pre-major Program**

MATH& 153                  Calculus III

PHYS& 221                  Engineering Physics I

PHYS& 222                  Engineering Physics II

PHYS& 223                  Engineering Physics III

CHEM& 161                  General Chemistry w/ Lab I

#### **E. Remaining Credits**

Pathways described below correspond to the major related pathways (MRPs) defined at:

[http://www.sbctc.edu/college/transfer/as\\_t\\_track2\\_engr\\_pathways\\_As\\_Proposed.doc](http://www.sbctc.edu/college/transfer/as_t_track2_engr_pathways_As_Proposed.doc)

### **Elective Requirements for All Pathways (15 credits recommended for all pathways):**

ENGL& 230                  Technical Writing

MATH 224                  Vector Calculus

MATH 238                  Differential Equations

### **BIO and CHEM E Pathway (select at least 20 credits from this list):**

CHEM& 162                  General Chemistry w/ Lab II

CHEM& 163                  General Chemistry w/ Lab III

CHEM& 241/251              Organic Chemistry w/ Lab I

CHEM& 242/252              Organic Chemistry w/ Lab II

CHEM& 243/253              Organic Chemistry w/ Lab III

BIOL& 211                  Biology Majors I (for BE Pathway)

MATH 220                  Linear Algebra (for BE Pathway)

ENGR& 204            Electrical Circuits

**Comp E and EE Pathway (select at least 20 credits from this list):**

CHEM& 162            General Chemistry w/ Lab II

MATH 220            Linear Algebra

ENGR& 214            Statics (for EE pathway)

ENGR& 204            Electrical Circuits

CSC 142              Computer Programming\*\*

CSC 143              Computer Programming II\*\*

\*\* For EE pathway, good for background preparation, but will not substitute as CptS 121 at WSU

**Mechanical, Civil, Materials Science, and Other Engineering Pathway (select at least 20 credits from this list):**

MATH 220            Linear Algebra

BIOL& 260            Microbiology (for CE pathway)

CHEM& 162            General Chemistry w/ Lab II

CHEM& 163            General Chemistry w/ Lab III (for MSE pathway)

ENGR& 204            Electrical Circuits

ENGR& 214            Statics

ENGR& 215            Dynamics

ENGR& 225            Mechanics of Materials

CSC 142              Computer Programming for Engineers (for ME/MSE pathway)

CMST& 220            Public Speaking (for CE pathway)\*

CMST& 230            Group Communication (for CE pathway)\*

\*(Only one of CMST& 220 or CMST& 230 needed for CE pathway, may also fulfill requirement in section C)

**This document is accurate as of February 23, 2016. The latest version can be found at [www.cea.wsu.edu/transferstudents](http://www.cea.wsu.edu/transferstudents)**

**For general questions about this document or to report an error, please contact Kasey Schertenleib at [kasey@wsu.edu](mailto:kasey@wsu.edu) or 509-335-6613.**

### **Advantages of the AST2 Degree When Transferring to WSU**

- Courses designated [H]-Humanities and [S]-Social Science by your Community College are accepted as [HUM] and [SSCI] by WSU.
- [BIOL]-Biological Science UCORE requirement is waived by WSU if your degree program does not require Biology.

### **WSU Writing Portfolio**

At WSU, completion of the Junior Writing Portfolio is a General Education Requirement for graduation. Transfer students entering with 60 or more credits must initiate the Junior Writing Portfolio by the end of their first semester at WSU. To this end, you should save examples of writing from coursework completed at your Community College. Instructor sign-off is required. For more information, please visit:

[www.writingprogram.wsu.edu/units/writingassessment/midcollege/writingportfolio/](http://www.writingprogram.wsu.edu/units/writingassessment/midcollege/writingportfolio/)

### **Alternative Options for Obtaining WSU Engineering Credits**

- Check with neighboring Colleges to see if alternative engineering electives are available which are transferable to WSU.
- Consider enrolling in a distance education course through Washington Online.  
<http://www.waol.org>
- Consider enrolling in WSU Summer Session prior to Fall enrollment.  
<http://www.summer.wsu.edu/>

**For specific questions regarding transfer equivalencies, please contact one of the WSU academic coordinators listed below:**

#### **School of Bioengineering and Chemical Engineering**

Maria Greaney-Curry

509-335-1041

[mgreaney@wsu.edu](mailto:mgreaney@wsu.edu)

#### **Department of Civil and Environmental Engineering**

Kelli Gardner-Schrand and John Rarig

509-335-6933

509-335-1219

[k.gardner-schrand@wsu.edu](mailto:k.gardner-schrand@wsu.edu)

[jrarig@wsu.edu](mailto:jrarig@wsu.edu)

#### **School of Electrical Engineering and Computer Science**

Josh Whiting

509-335-2446

[joshwhiting@wsu.edu](mailto:joshwhiting@wsu.edu)

#### **School of Mechanical and Materials Engineering**

Pullman Campus

Priscilla Hastay

509-335-8582

[hastay@wsu.edu](mailto:hastay@wsu.edu)

Bremerton/Everett

Linda Howell

509-335-2483

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