

# Olympic College

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

For more information on the Mechanical Engineering Degree program at WSU-Bremerton, please contact Dr. Marvin Pitts at [pitts@wsu.edu](mailto:pitts@wsu.edu) or 360-475-7543

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& 163                      Calculus 3

PHYS 254                      Engineering Physics

PHYS 255                      Engineering Physics

PHYS 256                      Engineering Physics

CHEM& 141/151                  General Chemistry w/ Lab I

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

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

[http://www.sbctc.edu/docs/education/transfer/2008-as-t\\_track2\\_engr\\_compsci\\_physics\\_atmossoci.pdf](http://www.sbctc.edu/docs/education/transfer/2008-as-t_track2_engr_compsci_physics_atmossoci.pdf)

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

MATH& 264                      Calculus 4

MATH 221                      Differential Equations I

ENGL& 235                      Technical Writing

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

CHEM& 142/152                  General Chemistry w/ Lab II

CHEM& 143/153                  General Chemistry w/ Lab III

CHEM& 241/251                  Organic Chem w/ Lab I

CHEM& 242/252                  Organic Chem w/ Lab II

CHEM& 243/253                  Organic Chem w/ Lab III

ENGR& 214 Statics (for BE pathway; Elective for ChE)  
ENGR& 204 Electrical Circuits  
ENGR& 215 Dynamics (Electives for both)  
ENGR& 224 Thermodynamics (Electives for both)

MATH 250 Linear Algebra (for BE Pathway)

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

CHEM& 142/152 General Chemistry w/ Lab II

MATH 250 Linear Algebra

ENGR& 204 Electrical Circuits  
ENGR& 214 Statics (for EE pathway)  
ENGR& 224 Thermodynamics (for EE pathway)  
CIS 145 Introduction to C Language  
CIS 200 Programming Laboratory

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

MATH 250 Linear Algebra

BIOL& 260 Microbiology (for CE pathway)

CS& 141 Computer Science I Java (for MSE and ME pathways)

CHEM& 142/152 General Chemistry w/ Lab II  
CHEM& 143/153 General Chemistry w/ Lab III (for MSE pathway)

ENGR& 214 Statics  
ENGR& 215 Dynamics  
ENGR& 225 Mechanics of Materials  
ENGR& 204 Electrical Circuits\*  
ENGR& 224 Thermodynamics\*  
ENGR 240 Applied Numerical Methods for Engineering (for MSE, ME, or CE pathways)

\*(Only one of ENGR& 204 or ENGR& 224 needed for CE pathway)

CMST& 220 Public Speaking (for CE pathway)\*\*  
CMST& 230 Small Group Communication (for CE pathway)\*\*

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

**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 509-335-66**

### **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 courses 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	Bremerton/Everett
Priscilla Hastay	Linda Howell
509-335-8582	509-335-2483
<a href="mailto:hastay@wsu.edu">hastay@wsu.edu</a>	<a href="mailto:linda.howell@wsu.edu">linda.howell@wsu.edu</a>