

# Clark 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& 206            Introduction to Cultural Anthropology

Humanities Elective [HA]

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

MATH& 153            Calculus III

PHYS& 241            Engineering Physics I

PHYS& 242            Engineering Physics II

PHYS& 243            Engineering Physics III

CHEM& 141            General Chemistry I

CHEM& 151            General Chem 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):**

ENGL& 235            Technical Writing

MATH& 254            Calculus IV

MATH 221            Differential Equations

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

CHEM& 142	General Chemistry II
CHEM& 152	General Chem Lab II
CHEM& 143	General Chemistry III
CHEM& 153	General Chem Lab III
CHEM& 241	Organic Chemistry I
CHEM& 242	Organic Chemistry II
CHEM& 243	Organic Chemistry III
CHEM& 251	Organic Chem Lab I
CHEM& 252	Organic Chem Lab II
BIOL& 222	Majors Cell/Molecular (for BE pathway)
MATH 215	Linear Algebra (for BE Pathway)
ENGR& 224	Thermodynamics

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

CHEM& 142	General Chemistry II
CHEM& 152	General Chem Lab II
MATH 215	Linear Algebra
ENGR& 214	Statics (for EE pathway)
ENGR& 224	Thermodynamics
PHIL& 120	Symbolic Logic
CSE 121	Introduction to C
CSE 222	Introduction to Data Structures
CSE 223	Data Structures and Object-Oriented Programming
CSE 224	Programming Tools

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

MATH 215	Linear Algebra
BIOL& 260	Microbiology (for CE pathway)
CHEM& 142	General Chemistry II
CHEM& 152	General Chem Lab II
CHEM& 143	General Chemistry III (for MSE pathway)
CHEM& 153	General Chem Lab III (for MSE pathway)
ENGR 101	Innovation in Design
ENGR 150	Basic Solidworks (for ME pathway)

ENGR& 214            Statics  
ENGR& 215            Dynamics  
ENGR& 224            Thermodynamics\*  
ENGR& 225            Mechanics of Materials

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 C)

**This document is accurate as of October, 2016. The latest version can be found at [www.vcea.wsu.edu/transferstudents](http://www.vcea.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. <https://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	John Rarig
509-335-6933	509-335-1219
<a href="mailto:k.gardner-schrand@wsu.edu">k.gardner-schrand@wsu.edu</a>	<a href="mailto:jrarig@wsu.edu">jrarig@wsu.edu</a>

**School of Electrical Engineering and Computer Science**

Josh Whiting	Alli Guyer
509-335-2446	509- 335-0636
<a href="mailto:joshwhiting@wsu.edu">joshwhiting@wsu.edu</a>	<a href="mailto:alliguyer@wsu.edu">alliguyer@wsu.edu</a>

**School of Mechanical and Materials Engineering**

Debi Mundell	Paul Veridian
509-335-7386	509-335-8582
<a href="mailto:debi.mundell@wsu.edu">debi.mundell@wsu.edu</a>	<a href="mailto:paul.veridian@wsu.edu">paul.veridian@wsu.edu</a>

**Distance Degree Programs in Bremerton/Everett**

Linda Howell  
509-335-2483  
[linda.howell@wsu.edu](mailto:linda.howell@wsu.edu)