Highline 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  Macroeconomics
   ANTH& 100  Survey of Anthropology
   Humanities Elective [HA]

D. Pre-major Program
   MATH& 153  Calculus III
   PHYS 201  Engineering Physics I – Mechanics
   PHYS 202  Engineering Physics II – Electricity and Magnetism
   PHYS 203  Engineering Physics III – Waves, Thermodynamics, and Modern Topics
   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/docs/education/transfer/2008-as-t_track2_engr_compsci_physics_atmossci.pdf

Elective Requirements for All Pathways (15 credits recommended for all pathways):
   MATH& 254  Calculus IV
   MATH 230  Differential Equations

   ENGL& 235  Technical Writing

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& 261  Organic Chemistry w/ Lab I
   CHEM& 262  Organic Chemistry w/ Lab II
   CHEM& 263  Organic Chemistry w/ Lab III

   BIOL& 211  Majors Cell
ENGR& 204  Electrical Circuits
ENGR& 224  Thermodynamics

MATH 220  Linear Algebra (for BE Pathway)

**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
ENGR& 224  Thermodynamics

**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& 214  Statics
ENGR& 215  Dynamics
ENGR& 225  Mechanics of Materials
ENGR& 204  Electrical Circuits
ENGR& 224  Thermodynamics
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 April 18, 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/

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 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:

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