Tacoma 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
Humanities Elective [HA] – course must meet multicultural requirement
ENGR& 104 Introduction to Engineering and Design

D. Pre-major Program
MATH& 153 Calculus III
PHYS 121 Engineering Physics I
PHYS 122 Engineering Physics II
PHYS 123 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

Elective Requirements for All Pathways (15 credits recommended for all pathways):
ENGL& 235 Technical Writing
MATH& 254 Calculus IV
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& 261 Organic Chemistry w/ Lab I
CHEM& 262 Organic Chemistry w/ Lab II
CHEM& 263 Organic Chemistry w/ Lab III
BIOL& 222 Intro to Cellular and Molecular Biology (for BE pathway)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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</thead>
<tbody>
<tr>
<td>MATH 220</td>
<td>Linear Algebra (for BE Pathway)</td>
</tr>
<tr>
<td>ENGR&amp; 204</td>
<td>Electrical Circuits</td>
</tr>
<tr>
<td>ENGR&amp; 224</td>
<td>Thermodynamics</td>
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**Comp E and EE Pathway:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>CHEM&amp; 162</td>
<td>General Chemistry w/ Lab II</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Linear Algebra</td>
</tr>
<tr>
<td>ENGR&amp; 204</td>
<td>Electrical Circuits</td>
</tr>
<tr>
<td>ENGR&amp; 214</td>
<td>Statics (for EE pathway)</td>
</tr>
<tr>
<td>ENGR&amp; 224</td>
<td>Thermodynamics</td>
</tr>
</tbody>
</table>

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

<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>MATH 220</td>
<td>Linear Algebra</td>
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<tr>
<td>BIOL&amp; 260</td>
<td>Microbiology (for CE pathway)</td>
</tr>
<tr>
<td>CHEM&amp; 162</td>
<td>General Chemistry w/ Lab II</td>
</tr>
<tr>
<td>CHEM&amp; 163</td>
<td>General Chemistry w/ Lab III (for MSE pathway)</td>
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<tr>
<td>ENGR&amp; 114</td>
<td>Engineering Graphics (for ME pathway)</td>
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<tr>
<td>ENGR&amp; 204</td>
<td>Electrical Circuits*</td>
</tr>
<tr>
<td>ENGR&amp; 214</td>
<td>Statics</td>
</tr>
<tr>
<td>ENGR&amp; 215</td>
<td>Dynamics</td>
</tr>
<tr>
<td>ENGR&amp; 224</td>
<td>Thermodynamics*</td>
</tr>
<tr>
<td>ENGR&amp; 225</td>
<td>Mechanics of Materials</td>
</tr>
</tbody>
</table>

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

<table>
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<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>CMST&amp; 220</td>
<td>Public Speaking (for CE pathway)**</td>
</tr>
<tr>
<td>CMST&amp; 230</td>
<td>Group Communication (for CE pathway)**</td>
</tr>
</tbody>
</table>

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

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This document is accurate as of February 26, 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 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 [H] and [S] by WSU.
- [B]-Biological Science General Education Requirement (GER) 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:

School of Bioengineering and Chemical Engineering
Maria Greaney-Curry
509-335-1041
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
jrarig@wsu.edu

School of Electrical Engineering and Computer Science
Josh Whiting
509-335-2446
joshwhiting@wsu.edu

School of Mechanical and Materials Engineering
Pullman Campus        Bremerton/Everett
Priscilla Hastay      Linda Howell
509-335-8582          509-335-2483
hastay@wsu.edu        linda.howell@wsu.edu