1. BASIC SKILLS (30 credits)

A. Communication Skills:
(5 credits)
Courses in this area support the written communication learning outcome.
English &101

B. Quantitative Skills/ Symbolic Reasoning
(25 credits)
Courses in this area support the quantitative and symbolic reasoning learning outcome.
Mathematics &151 &152 &153, 238 and &254

2. HUMANITIES/FINE ARTS/ENGLISH AND SOCIAL SCIENCE (15 credits)

Minimum 5 credits each from humanities/fine arts/English and social science area plus 5 additional credits in either area (for a total of 15 credits). Three separate areas.

A. Humanities/Fine Arts/ English
A minimum of 5 credits from the following. No more than 5 credits in any one discipline. No more than 5 credits in performance/skills courses (all courses in bold type) can be applied towards Humanities/Fine Arts/ English distribution. No more than 5 credits in foreign language at the 100 level.
Chinese 111, &121, &122, &123
Communication Studies &102, &210, &220, 212, 215, &230, 238, 245, 265, 266
Dance 101, 102, 103, 110, 204
Drama &101, 102, 111, 151, 152, 153, 154, 157
Film 120, 121, 122, 191
French &121, &122, &123, &221, &222, &223
German &121, &122, &123
Humanities 100, 110, 133, 142, 146, 160, 186, 190, 191, 224
Japanese &121, &122, &123, &221, &222
Journalism 101, 107, 150, 151, 152, 254
Photography 101, 102, 103, 111
Spanish &110, &121, &122, &123, &221, &222, &223

B. Social Science
A course in Economics is recommended. A minimum of 5 credits from the following:
American Minority and Ethnic Studies 100, 103, 105, 150, 211
Anthropology &100, &204, &205, &206, &207, &210, 211, &216, &234, &235, &236, 273
Business Management &101, &201
Criminal Justice &101, &105, &110, &240
Economics 100, 101, &201, &202
Geography &100, 120, 123, 190, &200, 201, 205
Political Science &101, &200, &202, &203, &204, 207, 209, 220
Psychology &100, &180, &200, 201, 209, &220, 225, 240, 250
Social Science 160, 211

3. SPECIFIC REQUIREMENTS
(59-60 credits)
It is strongly suggested that students beginning their science sequence complete it at the originating college.
A. Physics &221, &222 and &223 (15 credits)
B. Chemistry &161, &162, &163 and &261 (24 credits)
C. Biology &100 or Chemistry &262 (5-6 credits)
D. Select at least 15 credits from the following list after consultation with an engineering advisor.
Biology &100
Chemistry &263*
Computer Science 120, &131, 132, &141, or 145
Engineering 100, 120, &204, &224, 250
English 128
Mathematics 240
* An online course in chemical process, principles, and calculations will be added to this degree in the future.

4. TRANSFERABILITY OF CREDITS
Green River College is fully accredited. Academic courses will usually be accepted by other institutions offering the same (or similar) courses. However, each institution has its own transfer policies and each student is responsible for knowing the transfer and admission requirements of the receiving institution. Students are urged to consult with their advisor and a representative from the college they plan to attend after Green River.

Green River College does not discriminate on the basis of race, creed, color, national origin, sex, sexual orientation, age, marital status, religion, disability, genetic information or on any other unlawful basis. The college is committed to preventing and stopping discrimination, including harassment of any kind and any associated retaliatory behavior.

The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President of Human Resources, 12401 SE 320th Street, Auburn, WA 98092-3622, (253) 288-3320. To receive this information in an alternate format, please contact Disability Support Services at (253) 833-9111, ext. 2631; TTY (253) 288-3359.

The above program of study was current at the time of printing. The program may have been updated or changed to remain industry current. For program updates, please go to our web site at greenriver.edu or contact the faculty adviser listed.
# Associate in Biological or Chemical Pre-Engineering

## Associate in Science Transfer Degree—Option 2/Major Related Program (AST-2/MRP)

### Minimum of 104-105 Credits

### Summer 2016

## Planning Guide

### 1. BASIC SKILLS (30 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Engl&amp; 101</td>
<td>(5)</td>
</tr>
<tr>
<td>B. Math&amp; 151</td>
<td>(5)</td>
</tr>
<tr>
<td>Math&amp; 152</td>
<td>(5)</td>
</tr>
<tr>
<td>Math&amp; 153</td>
<td>(5)</td>
</tr>
<tr>
<td>Math 238</td>
<td>(5)</td>
</tr>
<tr>
<td>Math 254</td>
<td>(5)</td>
</tr>
</tbody>
</table>

### 2. HUMANITIES/FINE ARTS/ENGLISH and SOCIAL SCIENCE (15 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Humanities/Fine Arts/English</td>
<td>(5)</td>
</tr>
<tr>
<td>B. Social Science (5 credits)</td>
<td></td>
</tr>
<tr>
<td>A course in Economics is recommended.</td>
<td>(5)</td>
</tr>
<tr>
<td>C. 5 credits from either Humanities/Fine Arts/English or Social Science</td>
<td>(5)</td>
</tr>
</tbody>
</table>

### 3. SPECIFIC PRE-MAJOR (59-60 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Phys&amp; 221</td>
<td>(5)</td>
</tr>
<tr>
<td>Phys&amp; 222</td>
<td>(5)</td>
</tr>
<tr>
<td>Phys&amp; 223</td>
<td>(5)</td>
</tr>
<tr>
<td>B. Chem&amp; 161</td>
<td>(6)</td>
</tr>
<tr>
<td>Chem&amp; 162</td>
<td>(6)</td>
</tr>
<tr>
<td>Chem&amp; 163</td>
<td>(6)</td>
</tr>
<tr>
<td>Chem&amp; 261</td>
<td>(6)</td>
</tr>
<tr>
<td>C. Biol&amp; 100 or Chem&amp; 262</td>
<td>(5-6)</td>
</tr>
<tr>
<td>D. Select 15 credits from the following list after consultation with an Engineering advisor.</td>
<td></td>
</tr>
<tr>
<td>Biol&amp; 100</td>
<td>(5)</td>
</tr>
<tr>
<td>Chem&amp; 263</td>
<td>(6)</td>
</tr>
<tr>
<td>CS 120, &amp;131, 132, &amp;141, 145</td>
<td>(5)</td>
</tr>
<tr>
<td>Engr 100, 120, &amp;204, &amp;224, 250</td>
<td>(2-5)</td>
</tr>
<tr>
<td>Engl 128</td>
<td>(5)</td>
</tr>
<tr>
<td>Math 240</td>
<td>(5)</td>
</tr>
</tbody>
</table>

## Notes:

1. Students must maintain a minimum overall GPA of 2.0. This minimum may not meet the entrance requirements at a four-year college.
2. Some majors at a four-year college have special requirements. It is the students’ responsibility to know these. Consult an Educational Planner or Faculty advisor for assistance in identifying or researching specific major requirements.

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