### READ THIS FIRST:
- Start your degree with math and English. No degree plans can be done without math and English placement.
- The final responsibility for understanding and fulfilling all graduation requirements rests with each student.

### Preparatory math as necessary:
- □ MATH 97
- □ MATH 98
- □ MATH 99
- □ MATH& 141
- □ MATH& 142

### Pre-Reqs | Course | Credits | Taken
--- | --- | --- | ---
MATH& 142 with C or better | MATH& 151 | Calculus I | 5
MATH& 151 with C or better | MATH& 152 | Calculus II | 5
MATH& 152 with C or better | MATH& 163 | Calculus III | 5

**Subtotal** 15

### CORE REQUIREMENTS: MATH

### CORE REQUIREMENTS: SCIENCE AND ENGINEERING

Prior or concurrent MATH& 141; placement in ENGL& 101

- ENGR 101 Introduction to Engineering 5

**Note:** ENGR 101 may be waived for students entering the pathway with advanced standing (MATH& 152 or higher). If waived, students must complete 5 additional credits in program-specific requirements.

MATH& 141 with C or better.

- CHEM& 161 General Chemistry with Lab I 5

MATH& 151 with C or better; placement in ENGL& 101; previous college physics course or high school physics

- PHYS& 221 Engineering Physics I 5

MATH& 152 with C or better; PHYS& 221 with C or better; placement in ENGL& 101

- PHYS& 222 Engineering Physics II 5

PHYS& 222 with C or better

- PHYS& 223 Engineering Physics III 5

**Subtotal** 20-25

### PROGRAM-SPECIFIC REQUIREMENTS

Students must complete a minimum of 30 credits (35 credits, if ENGR 101 waived above) selected from the following list. The appropriate selection depends on the intended engineering major and transfer institution.

Prior or concurrent CHEM& 161; placement in ENGL& 101

- BIOL& 221 Majors Ecology/Evolution 5

CHEM& 161 with C- or better; BIOL& 221 with C- or better; placement in ENGL& 101

- BIOL& 222 Majors Cell Biology/Molecular 5

BIOL& 222 with C- or better; placement in ENGL& 101

- BIOL& 223 Majors Organismal Physiology 5

CHEM& 161 with C or better

- CHEM& 162 General Chemistry with Lab II 5

CHEM& 162 with C or better

- CHEM& 163 General Chemistry with Lab III 5

CHEM& 163

- CHEM& 261 Organic Chemistry with Lab I 5

CHEM& 261

- CHEM& 262 Organic Chemistry with Lab II 5

CHEM& 262

- CHEM& 263 Organic Chemistry with Lab III 5

MATH 99

- CS 140 Computer Programming Fundamentals I 5

CS 140

- CS 145 Computer Programming Fundamentals II 5

CS 145

- CS 240 Data Structure and Algorithm Fundamentals 5

ENGL& 101 with C- or better

- ENGL& 230 Technical Writing 3

ENGL& 101 with C- or better

- or ENGL& 235 Technical Writing 5

**Note:** Credit for both ENGL& 230 and ENGL& 235 cannot be applied to this requirement.

Prior or concurrent MATH& 141. Recommended: ENGR 101

- ENGR& 114 Engineering Graphics 5

**LIST CONTINUES ON BACK**
<table>
<thead>
<tr>
<th>Pre-Reqs</th>
<th>Course</th>
<th>Credits</th>
<th>Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH&amp; 152 with C or better or both MATH&amp; 142 and ENGR 101 with grades of C or better; placement in ENGL&amp; 101</td>
<td>ENGR 151</td>
<td>Introductory Design and Computing</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 161 and PHYS&amp; 221 with a C or better</td>
<td>ENGR 201</td>
<td>Fundamentals of Material Science</td>
<td>5</td>
</tr>
<tr>
<td>PHYS&amp; 223 with C or better; prior or concurrent MATH 238; placement in ENGL&amp; 101. Recom: ENGR 151 and MATH 204</td>
<td>ENGR&amp; 204</td>
<td>Electrical Circuits</td>
<td>6</td>
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<tr>
<td>MATH&amp; 152 with C or better; PHYS&amp; 211 with C or better; placement in ENGL&amp;101</td>
<td>ENGR&amp; 214</td>
<td>Statics</td>
<td>5</td>
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<tr>
<td>MATH&amp; 163 with C or better; PHYS&amp; 221 with C or better; ENGR&amp; 214 with C or better</td>
<td>ENGR&amp; 215</td>
<td>Dynamics</td>
<td>5</td>
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<tr>
<td>CHEM&amp; 162 with C or better; MATH&amp; 152 with C or better; PHYS&amp; 222 with C or better; placement in ENGL&amp;101</td>
<td>ENGR&amp; 224</td>
<td>Thermodynamics</td>
<td>5</td>
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<tr>
<td>Note: See an advisor if taking ENGR&amp; 224 in 2018-19.</td>
<td></td>
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<tr>
<td>ENGR&amp; 214 with C or better; placement in ENGL&amp; 101</td>
<td>ENGR&amp; 225</td>
<td>Mechanics of Materials</td>
<td>5</td>
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<tr>
<td>MATH&amp; 163 with C or better; MATH 207 with C or better. Recom: prior/concurrent MATH204</td>
<td>ENGR 240</td>
<td>Applied Numerical Methods</td>
<td>5</td>
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<tr>
<td>MATH&amp; 151 with C or better</td>
<td>MATH 204</td>
<td>Introduction to Linear Algebra</td>
<td>5</td>
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<tr>
<td>MATH&amp; 152 with C or better</td>
<td>MATH 207</td>
<td>Taylor Series</td>
<td>1</td>
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<tr>
<td>MATH&amp; 151 with C or better or MATH 208</td>
<td>Sequences and Series</td>
<td>3</td>
<td></td>
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<tr>
<td>Note: Credit for both MATH 207 and MATH 208 cannot be applied to this requirement.</td>
<td></td>
<td></td>
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<tr>
<td>MATH&amp; 152 with C or better</td>
<td>MATH 238</td>
<td>Introduction to Differential Equations</td>
<td>5</td>
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<tr>
<td>MATH&amp; 163 with C or better</td>
<td>MATH&amp; 264</td>
<td>Calculus IV</td>
<td>5</td>
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<tr>
<td>Varies; see catalog</td>
<td>Other courses designated as H/Hp, SS, MS/MSl, CC, OC, Q/SR, LE</td>
<td>0-5</td>
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</table>

Subtotal 30-35

**Note:** See an advisor if selecting Materials Science or Thermodynamics in 2018-19.

**GENERAL EDUCATION REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 95 or placement in ENGL&amp; 101</td>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
</tr>
<tr>
<td>Varies; see catalog</td>
<td>Any course designated as humanities (H)</td>
<td>5</td>
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<tr>
<td>Varies; see catalog</td>
<td>Any course designated as social sciences (SS)</td>
<td>5</td>
</tr>
<tr>
<td>Varies; see catalog</td>
<td>Any additional course designated as humanities (H) or social sciences (SS)</td>
<td>5</td>
</tr>
</tbody>
</table>

Note: See an advisor for help choosing appropriate courses in this area. Depending on the major and the transfer institution, certain courses are preferred.

Subtotal 20

**ADDITIONAL GRADUATION REQUIREMENTS**

- Minimum of 15 college-level credits at Whatcom Community College
- Minimum 2.0 overall GPA in courses applied to this degree

**ADVISOR RECOMMENDATIONS**

- Complete each science sequence at a single college.
- Specific majors at each university may have different/additional prerequisites/GPA requirements. Check with your intended university for details.
- University of Washington requires foreign language for admission: two years of a single language in high school, or two quarters of a single language in college. Some majors also require a third year/quarter for graduation.