## Developmental Studies Courses
(no credits awarded for these courses)

Put a check in the box to the left of those Developmental Courses which are needed. The blank is for indicating the semester in which you plan to take the course.

- ESL 12 English as a Second Language: Composition
- ESL 13 English as a Second Language: Composition
- ENG 1 Preparing for College Writing I
- ENG 2 Preparing for College Writing II
- ENG 4 Reading Improvement I
- ENG 5 Reading Improvement II
- NAS 2 Foundations of Life Science
- MTH 2 Arithmetic
- BSK 6 Pre-Algebra
- BSK 8 Algebra 1A
- BSK 9 Algebra 1B
- MTH 4 Algebra II
- Other

**Admission Requirements:** Admission to the College. There are no additional admission requirements for this program.

**Admission Process:** Student must select Engineering AS as his/her program of study on the College's Web application. If currently enrolled in a program of study student is required to meet with a counselor to change his/her curriculum of study. Students are strongly encouraged to meet with the assigned faculty advisor or a counselor prior to selecting first semester courses. In subsequent semesters students should consult with the assigned faculty advisor prior to course enrollment.

### First Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Credits</th>
<th>Planned</th>
<th>Completed</th>
<th>Spring Semester</th>
<th>Credits</th>
<th>Planned</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 111 College Chemistry I</td>
<td>4</td>
<td></td>
<td></td>
<td>EGR 115 Engineering Graphics&lt;sup&gt;1&lt;/sup&gt;</td>
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<tr>
<td>CSC 110 Introduction to Computing</td>
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<td>ECO 201 Macroeconomics</td>
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<tr>
<td>EGR 120 Introduction to Engineering&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>ENG 111 College Composition I</td>
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<tr>
<td>MTH 173 Calculus with Analytic Geometry I</td>
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<tr>
<td>SDV ___ Student Orientation</td>
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**Total Credits** 18

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<tr>
<th>Spring Semester</th>
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<tr>
<td>EGR 115 Engineering Graphics&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>ECO 201 Macroeconomics</td>
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<td>HLT/PED Health or Physical Ed Elective</td>
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<tr>
<td>ENG 112 College Composition II</td>
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<tr>
<td>MTH 174 Calculus with Analytic Geometry II</td>
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**Total Credits** 18

### Second Year

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<th>Credits</th>
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<th>Completed</th>
<th>Spring Semester</th>
<th>Credits</th>
<th>Planned</th>
<th>Completed</th>
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<tbody>
<tr>
<td>MTH 277 Vector Calculus</td>
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<td>Engineering Elective/</td>
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<tr>
<td>PHY 241 University Physics I</td>
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<td>Technical Elective&lt;sup&gt;2, 3&lt;/sup&gt;</td>
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<td>EGR 126 Comp Program for Engineers or</td>
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<td></td>
<td>EGR ___ Engineering Elective&lt;sup&gt;2&lt;/sup&gt;</td>
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<tr>
<td>CSC 201 Computer Science I</td>
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<td></td>
<td>HLT/PED Health or Physical Ed Elective</td>
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<tr>
<td>EGR 240 Solid Mechanics (Statics)</td>
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<td>Humanities Elective&lt;sup&gt;8&lt;/sup&gt;</td>
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<td></td>
<td>PHY 242 University Physics II</td>
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**Total Credits** 17-18

<table>
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<tr>
<th>Spring Semester</th>
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<td>Engineering Elective/</td>
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</tbody>
</table>

**Total Credits** 17-18

*Total Minimum Credits: 70*. 

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**Bob Miller, Dean**  
**Business and Technologies Division**  
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[Business&TechnologiesDivision@pvcc.edu](mailto:Business&TechnologiesDivision@pvcc.edu)

**Faculty Advisor:**  
Ali Bouabid  
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**Engineering Program Liaison:**  
Andrew Renshaw  
[arenshaw@pvcc.edu](mailto:arenshaw@pvcc.edu), Phone 434.961.5484
EGR 120 (4 contact hours) has a prerequisite of ENG 3 and co-requisite of CSC 110 and MTH 164 or MTH 166, sufficient SAT score, or sufficient placement score; EGR 115 (5 contact hours) has a prerequisite of EGR 120 with a grade of “C” or better and co-requisite of MTH 173 or course equivalency. Please contact the Business and Technologies Division for additional information.

Engineering electives: Students are advised to choose from the following list of courses but should check with the intended transfer institution to ensure that the courses will transfer.
EGR 245 Engineering Mechanics-Dynamics (3 credits / 3 contact hours)
EGR 246/247 Mechanics of Materials / 2 Hour Lab (4 credits total / 5 contact hours)
EGR 251/255 Basic Electric Circuits / 3 Hour Lab (4 credits total / 6 contact hours)
EGR 277/278 Digital Logic / 2 Hour lab (4 credits total / 5 contact hours)

Technical electives: Students are advised to choose from the following list of courses but should check with the intended transfer institution to ensure that the courses will transfer.
CHM 112/Lab College Chemistry II / 3 Hour lab (4 credits / 6 contact hours)
CSC 201 Computer Science I (4 credits / 4 contact hours)
MTH 279 Ordinary Differential Equations (4 credits / 4 contact hours)

The minimum number of credits required for graduation from the Piedmont Virginia Community College AS degree program in Engineering is 70 credits. The Bachelor of Science degree in engineering at most four-year institutions will require specific engineering and technical electives at the freshman and sophomore level. Students should consult with the engineering program liaison or engineering advisor at the earliest possible date to acquaint themselves with the requirements of the engineering program of the intended transfer institution. Student choice should be based on the requirements of four-year institution to which student plans on transferring.

*APPROVED ELECTIVES (The most current version of the Approved Electives list is the one found on the college Web site immediately preceding the program curricular sheets in the College catalog.)

Unless otherwise specifically indicated on the curricular sheet, the following electives will meet the requirements for PVCC associate degrees for the category of courses listed.

**Approved Humanities Course Electives**

[Revisions effective 5/16/09. Students enrolled prior to 5/16/09 [without a lapse in enrollment] can use the list in effect when they enrolled.]

**ART** 100, ART 101, ART 102, ART 121, ART 122, ART 125, ART 131, ART 132, ART 153, ART 154, ART 216, ART 221, ART 222, ART 231, ART 232, ART 235, ART 236, ART 241, ART 242, ART 243, ART 244, ART 253, ART 254, ART 259, ART 271, ART 272

Any **ASL** 100 or 200 series

CST 130, CST 131, CST 132, CST 141, CST 142, CST 229, CST 250

**DAN** 200, DAN 210

**ENG** 150, ENG 211, ENG 212, ENG 237, ENG 241, ENG 242, ENG 243, ENG 244, ENG 251, ENG 252, ENG 253, ENG 254, ENG 255, ENG 261, ENG 262, ENG 271, ENG 272, ENG 273, ENG 274, ENG 276

Any **FRE** 100† or 200 series

Any **GER** 100† or 200 series

Any **GRE** 100† or 200 series

**HUM** 201, HUM 202, HUM 241, HUM 242, HUM 259

Any **ITA** 100† or 200 series

Any **JPN** 100† or 200 series

Any **LAT** 100† or 200 series

**MUS** 121, MUS 122, MUS 127, MUS 221, MUS 222

**PHI** 101, PHI 102, PHI 111, PHI 200, PHI 220, PHI 227, PHI 260, PHI 266, PHI 276

**REL** 200, REL 210, REL 215, REL 216, REL 230, REL 233, REL 237, REL 240, REL 246

Any **RUS** 100† or 200 series

Any **SPA** 100† or 200 series

† 100 level foreign language courses may NOT be used to satisfy the humanities graduation requirement in programs where only one humanities course is required. In programs with two humanities courses, only one 100 level foreign language course may be used to satisfy the humanities graduation requirement.

**Approved Social Science Course Electives**

**ECO** 201, ECO 202

**GEO** 200, GEO 210, GEO 220

**HIS** 101, HIS 102, HIS 111, HIS 112, HIS 121, HIS 122, HIS 155, HIS 211, HIS 241, HIS 242, HIS 253, HIS 254, HIS 270, HIS 277, HIS 281, HIS 282

**PLS** 120, PLS 135, PLS 211, PLS 212, PLS 241, PLS 242

**PSY** 200, PSY 215, PSY 230, PSY 235, PSY 236, PSY 237

**SOC** 200, SOC 215, SOC 266, SOC 268