CAREER OPPORTUNITIES

Student is provided the basic theory, upgrading and/or continuing education in H.V.A.C.R. (Heating, Ventilation, Air Conditioning, and Refrigeration).

DEPARTMENTAL ADMISSION REQUIREMENTS

None. For more departmental information call (562) 938-3066.

REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC/R 220</td>
<td>Refrigeration Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>AC/R 223</td>
<td>Gas Heating Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>AC/R 226</td>
<td>Air Properties and Measurement</td>
<td>2</td>
</tr>
<tr>
<td>AC/R 229</td>
<td>Heat Pumps</td>
<td>3</td>
</tr>
<tr>
<td>AC/R 230</td>
<td>Electrical Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>AC/R 233</td>
<td>Commercial Electrical for HVAC</td>
<td>3</td>
</tr>
<tr>
<td>AC/R 240</td>
<td>Advanced Air Conditioning</td>
<td>4</td>
</tr>
<tr>
<td>AC/R 421A</td>
<td>Automatic Controls for HVAC</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal Units: 24

Select SIX (6) units from the following courses:

† AC/R 421A-B Automatic Controls for Refrig., Air Conditioning & Heating 3:3
† AC/R 422 Air Conditioning System Design & Installation 3
AC/R 400A-B Uniform Mech. Code I & II 3:3
AC/R 450A-B Transport Refrigeration 5:5
† AC/R 271AD Work Experience (Maximum 4 units) 2-4

† or 272AD or 273AD
FORK 801 Forklift Safety & Operation 1

Subtotal units: 6

TOTAL UNITS: 30

LEGEND

† This course has a prerequisite; prerequisite courses must be completed with at least a "C" or "CR" grade (see catalog or schedule of classes).
For **CAREER CERTIFICATE:**
The Career Certificate is a one to two year program in occupational/technical areas at Long Beach City College which provides training in job skills and employment opportunities. Complete the required units listed above with a minimum grade of "C" in each course. Fifty percent (50%) or more of the unit requirements for this field of concentration must be completed in residence (credit earned by exam, where applicable, may be included).

For **ASSOCIATE DEGREE:**
The Associate Degree is a two-year college degree awarded by Long Beach City College that includes general education courses and a major. In addition to the requirements for this Career Certificate, complete the A. A. degree requirements specified in the Catalog. The requirements for general education/proficiency and the field of concentration need to be from the same catalog year. This catalog year may be any year between the year of initial enrollment to the present, provided continuous enrollment is maintained throughout (see the catalog for definition of "continuous enrollment"). Fifty per cent (50%) or more of the unit requirements for this field of concentration must be completed in residence (credit earned by exam, where applicable, may be included).

**REQUIRED** for Communication and Analytical Thinking requirement:
†ELECT 225 (Algebra & Trigonometry for Technicians), **OR** † Mathematics 110 or 110B (First Course in Algebra), **OR** a more advanced level of Mathematics may be substituted.

**NOTE:** To receive a certificate or degree you must submit completed application forms in the Admissions and Records Office during your final semester of course work.

In general, "double-counting" is not allowed. That is, one course may not be used to fulfill both a field of concentration requirement and to fulfill a general education requirement.

Students interested in transferring to a university to continue their study in this field of concentration or other majors are strongly advised to consult an LBCC academic counselor and refer to the ASSIST website (www.assist.org) for major preparation information. Counselors can clarify the different major and admissions requirements at a university. Students may visit the Student Success/Transfer Services Center to access further educational resources. To set up an appointment to see a counselor or schedule the SOAR Test, call LAC (562)938-4561 or PCC (562)938-3920.