**Curriculum Description**

The Heavy Equipment Operation, Management, and Service curriculum prepares students to efficiently operate heavy equipment such as dozers, loaders, scrapers, and graders, to perform maintenance on various types of heavy equipment, and to manage equipment systems.

Course work includes construction safety, proper equipment operation, grades, drawings, environmental concerns, heavy equipment design characteristics and features, equipment maintenance and service, and common equipment systems.

Graduates of this program may find employment with state and local government agencies and private contractors engaged in highway or other construction activities.

**Curriculum Requirements***
*for associate degree, diploma, and certificate programs in accordance with 1D SBCCC 400.10*

I. **General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.

II. **Major Hours.** AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work-based learning may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. (See second page for additional information.)

III. **Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

<table>
<thead>
<tr>
<th>AAS</th>
<th>Diploma</th>
<th>Certificate</th>
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</thead>
<tbody>
<tr>
<td>Minimum General Education Hours</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>Minimum Major Hours</td>
<td>49</td>
<td>30</td>
</tr>
<tr>
<td>Other Required Hours</td>
<td>0-7</td>
<td>0-4</td>
</tr>
<tr>
<td><strong>Total Semester Hours Credit (SHC)</strong></td>
<td><strong>64-76</strong></td>
<td><strong>36-48</strong></td>
</tr>
</tbody>
</table>

*Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic use of computers.*
## Major Hours

### A. Technical Core.
The subject/course core is comprised of subject areas and/or specific courses which are required for each curriculum program. A diploma program offered under an approved AAS program standard or a certificate which is the highest credential level awarded under an approved AAS program standard must include a minimum of 12 semester hours credit derived from the subject/course core of the AAS program.

### B. Program Major(s).
The Program Major must include a minimum of 12 semester hours credit from the required subjects and/or courses. The Program Major is in addition to the technical core.

### C. Other Major Hours.
Other major hours must be selected from prefixes listed on the curriculum standard. A maximum of 9 semester hours of credit may be selected from any prefix listed, with the exception of prefixes listed in the core or concentration. Work-based learning may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit.

### Heavy Equipment Operation, Management, and Service (A35340)

<table>
<thead>
<tr>
<th>Minimum Major Hours Required</th>
<th>AAS</th>
<th>Diploma</th>
<th>Certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. CORE</td>
<td>49 SHC</td>
<td>30 SHC</td>
<td>12 SHC</td>
</tr>
</tbody>
</table>

#### Required Courses:
- HEO 111 Heavy Equipment Operations I 12 SHC
- HEO 112 Heavy Equipment Operations II 12 SHC

#### Safety:
*(Select One Course):*
- HEO 150 MSHA for Equip Tech & Operator 2 SHC
- ISC 115 Construction Safety 2 SHC
- ISC 121 Environmental Health & Safety 3 SHC

#### Grades:
*(Select One Course):*
- HEO 113 Grades and Drawings 3 SHC
- HEO 114 Erosion Control & Regulations 2 SHC

### B. CONCENTRATION *(Not applicable)*

### C. OTHER MAJOR HOURS
To be selected from the following prefixes:

- ACC, BUS, CEG, CIV, CMT, EGR, HEO, HET, HYD, ISC, PME, PMT, SRV, TRN, WBL, and WLD

*Up to two semester hour credits may be selected from ACA.*

*Up to three semester hour credits may be selected from the following prefixes: ARA, ASL, CHI, FRE, GER, ITA, JPN, LAT, POR, RUS, and SPA.*