COMPUTER-AIDED DRAFTING (CAD) TECHNOLOGY, ASSOCIATE IN APPLIED SCIENCE

College(s): TR

Program Code: 0144

The Associate in Applied Science degree program in Computer-Aided Design (CAD) Technology provides the technical instruction and skill development for the graduate to become successfully employed in the drafting fields of the mechanical, architectural, and construction industry. Instruction is directed toward theoretical and technical skills in the use of modern drafting tools and equipment with emphasis placed on the training of CAD techniques.

Program Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH 101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>MATH 140</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>PHYSICS 231</td>
<td>General Physics I: Mechanics &amp; Wave Motion</td>
<td>4</td>
</tr>
<tr>
<td>Fine Arts &amp; Humanities course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CIS 120</td>
<td>Introduction to Computer Applications</td>
<td>3</td>
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</table>

Required Program Core

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CIS 103</td>
<td>Fundamentals of Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 116</td>
<td>Operating System I</td>
<td>3</td>
</tr>
<tr>
<td>CIS 123</td>
<td>Microcomputer Spreadsheets</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 100</td>
<td>Elements of Engineering Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 110</td>
<td>Introductory Drafting</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 111</td>
<td>Engineering Success Seminar</td>
<td>2</td>
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<tr>
<td>ENGR 131</td>
<td>Engineering Graphics &amp; Intro to Design</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 132</td>
<td>Descriptive Geometry</td>
<td>3</td>
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<tr>
<td>ENGR 190</td>
<td>Computer Programming for Engineers</td>
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<tr>
<td>ENGR 202</td>
<td>Advanced Drafting &amp; Basic Machine Design</td>
<td>3</td>
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<tr>
<td>MATH 141</td>
<td>Plane Trigonometry</td>
<td>3</td>
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<tr>
<td>CAD TEC 130</td>
<td>CAD Technology I</td>
<td>3</td>
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<tr>
<td>CAD TEC 170</td>
<td>CAD Technology II</td>
<td>3</td>
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<tr>
<td>CAD TEC 171</td>
<td>CAD Technology III</td>
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<td>CAD TEC 172</td>
<td>CAD Technology IV</td>
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<td>Total Hours</td>
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</table>

One course must fulfill the Human Diversity (HD) requirement.

Pathway

This is an example course sequence for students interested in earning a degree in Computer-Aided Design (CAD) Technology. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC), Advanced Certificate (AC) and Associate in Applied Science degree (AAS) in CAD Technology. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

Semester-by-Semester Program Plan for Full-Time Students

All plans can be modified to fit the needs of part-time students by adding more semesters.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester 1</td>
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</tr>
<tr>
<td>ENGLISH 101</td>
<td>Composition</td>
<td>3</td>
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<tr>
<td>CAD TEC 130</td>
<td>CAD Technology I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 140</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 100</td>
<td>Elements of Engineering Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 110</td>
<td>Introductory Drafting</td>
<td>2</td>
</tr>
<tr>
<td>Total Hours</td>
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| Semester 2   |                                                 |       |
| MATH 141     | Plane Trigonometry                               | 3     |
| ENGR 131     | Engineering Graphics & Intro to Design           | 3     |
| ENGR 111     | Engineering Success Seminar                      | 2     |
CAD TEC 170 | CAD Technology II | 3
CIS 103 | Fundamentals of Programming | 3

Hours | 14

**Semester 3**
CAD TEC 171 | CAD Technology III | 3
ENGR 202 | Advanced Drafting & Basic Machine Design | 3
ENGR 132 | Descriptive Geometry | 3
Fine Arts & Humanities course (HD) | 3
CIS 120 | Introduction to Computer Applications 1 | 3

Hours | 15

**Semester 4**
CAD TEC 172 | CAD Technology IV | 3
ENGR 190 | Computer Programming for Engineers | 3
PHYSICS 231 | General Physics I: Mechanics & Wave Motion 1 | 4
CIS 123 | Microcomputer Spreadsheets | 3
CIS 116 | Operating System I | 3

Hours | 16

Total Hours | 60

1

General Education Requirement

Choose your courses with your College Advisor.