

Associate of Applied Science Degree in General Engineering Technology: Computer-Aided Drafting Specialization

968-04

	Course#	Title	Credits
<p>AREA: General Engineering Technology: Computer-Aided Drafting Specialization</p> <p>DEGREE: Associate of Applied Science Degree</p> <p>LENGTH: Four semesters (two-year) program</p> <p>PURPOSE: Skills in computer-aided drafting (CAD) are increasingly valuable and sought in the workplace. This curriculum is designed to provide a thorough preparation in drafting, emphasizing the use of computers and, in particular, computer-aided design and drafting. Communication skills and problem-solving skills are also emphasized, both of which are critical to success in the workplace. This program is particularly valuable for those who wish to gain employment in technical support careers or for those who need to upgrade skills within their current fields.</p> <p>OCCUPATIONAL OBJECTIVES: CAD operator, CAD technician, drafting technician, engineer's aid or other related positions</p> <p>TRANSFER GUIDELINES: Although this program is not designed as a transfer program, it does include many courses which will transfer into engineering technology programs at select four-year institutions. This allows students who eventually develop a desire to transfer the opportunity to transfer about two-thirds or more of the credit earned. How much credit is actually transferable depends on the transfer institution selected. Students should work closely with an advisor if and when they develop an interest in transferring.</p> <p>PROGRAM REQUIREMENTS: This curriculum integrates courses in civil engineering technology, mechanical engineering technology, drafting, architecture, computer programming and general education. Students entering the program must have algebra I and geometry skills, or be willing to improve those skills through developmental studies. Technical electives should be selected in consultation with an assigned advisor. Upon satisfactory completion of the curriculum, graduates will be awarded the associate of applied science degree in general engineering technology with a computer-aided drafting specialization. Transfer opportunities for associate of applied science degrees, if existing, are very specific in nature. Students enrolling in an applied science degree with plans to transfer should explore opportunities with an advisor.</p>	<p>First Semester</p> <p>ARC 130 Materials and Methods of Construction 3</p> <p>EGR 110 Engineering Graphics 3</p> <p>ENG 111 College Composition I 3</p> <p>MEC 111 Materials for Industry 3</p> <p>MTH Approved Math Elective¹ 3</p> <p>SDV 100 College Success Skills 1</p> <p style="text-align: right;">Total 16</p> <p>Second Semester</p> <p>ARC 221 Architectural CAD Applications Software I 3</p> <p>CAD 241 Parametric Solid Modeling I 3</p> <p>EGR 216 Computer Methods in Engineering and Technology 3</p> <p>MEC 112 Processes of Industry 3</p> <p>MTH Approved Math Elective¹ 3</p> <p>Technical Elective³ 3</p> <p style="text-align: right;">Total 18</p> <p>Third Semester</p> <p>ARC 222 Architectural CAD Applications Software II 3</p> <p>CAD 242 Parametric Solid Modeling II 3</p> <p>CIV 171 Surveying I 3</p> <p>EGR 206 Engineering Economics 3</p> <p>PED/HLT Physical Education <u>or</u> Health Technical Elective³ 1 3</p> <p style="text-align: right;">Total 16</p> <p>Fourth Semester</p> <p>CIV 172 Surveying II 3</p> <p>ENG 112/ 115 College Composition II <u>or</u> Technical Writing 3</p> <p>IND 145 Introduction to Metrology Social Science Elective² Humanities Elective⁴ 3 3</p> <p style="text-align: right;">Total 15</p> <p style="text-align: right;">Program Total 65</p>	<p>¹ Approved higher level math courses include: MTH 120/158, MTH 158/163, MTH 163/164, MTH 163/271, MTH 271/272, MTH 173/174. Students should meet with program faculty.</p> <p>² Students may select social science electives from approved list on page 42.</p> <p>³ An approved list of Technical Electives is available on page 44.</p> <p>⁴ Students may select humanities electives from approved list on page 42.</p>	