












## Computer Aided Design Concentration (9444)

### Associate of Applied Science Degree

This concentration emphasizes using CAD (computer aided design) for layout, design, and creating drawings in mechanical and industrial applications.

Students planning to transfer to a four-year college or university should take MATH 1650 College Algebra (A), MATH 2400 Calculus for Business, Social, and Life Sciences, and PHYS 1610 General Physics I in lieu of MATH 1180 Technical Mathematics I, MATH 1280 Technical Mathematics II, PHYS 1100 Applied Physics Mechanics, and PHYS 1200 Applied Physics Heat and Thermodynamics.


Course	Title	Credit Hours
<b>First Semester</b>		
CADT 2100	Introduction to SolidWorks 	3
CIMN 1110	Machining Processes 	3
ENGL 1110 or ENGL 1111	English Composition I (A) <sup>1</sup> or English Composition I (B)	3
ENGR 1000	Introduction to Engineering Technology	2
FYEX 1000	First Year Experience	1
MATH 1400	Technical Mathematics <sup>2</sup>	4
<b>Credit Hours</b>		<b>16</b>
<b>Second Semester</b>		
CADT 2500	Advanced SolidWorks 	3
COMM 1000 or COMM 1100	Effective Public Speaking or Effective Interpersonal Communications	3
CIMN 1160	Applied Electricity 	2
MECT 1600	Geometric Dimensioning and Tolerancing 	2
MECT 2370 or CIMN 1210	Materials Technology  or Materials Processing	3
PHYS 1550	Everyday Physics <sup>3</sup>	3
<b>Credit Hours</b>		<b>16</b>
<b>Third Semester</b>		
CADT 2600	SolidWorks Design Productivity 	3
CIMN 2240	Jig and Fixture Design 	2
ENGL 1121	English Composition II-Technical Focus	3
MECT 2250	Mechanism Design 	3
Select course(s) from the Social and Behavioral Sciences Electives list		3
Select course(s) from the Arts and Humanities Electives List		3
<b>Credit Hours</b>		<b>17</b>
<b>Fourth Semester</b>		
BUSM 1300	Introduction to Business	3
BUSM 2400 or ENGL 1120	Business Communication or English Composition II	3
CIMN 2390	Fluid Power Technology	3
CIMN 2875	Design and Manufacturing Capstone 	3
QENT 1200	Quality Concepts and Techniques 	2
<b>Credit Hours</b>		<b>14</b>
<b>Total Credit Hours</b>		<b>63</b>

<sup>1</sup> English course selection is based on placement test results (ENGL 1111 English Composition I (B) is 4 credits; only 3 credits apply to the degree).

<sup>2</sup> MATH 1180 Technical Mathematics I will also meet this credit requirement. MATH 1400 Technical Mathematics will require additional coursework for transfer.

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3 PHYS 1100 Applied Physics Mechanics will also meet this credit requirement. PHYS 1550 Everyday Physics will require additional coursework for transfer.

 This course is designated as a technical course in the program. Students must earn a "C" grade or higher in the course to fulfill the college's graduation requirements policy.

## Electives

Course	Title	Credit Hours
<b>Arts and Humanities</b>		
ARTS 1120	Art Appreciation	3
ARTS 2220	Survey of Art I	3
ARTS 2230	Survey of Art II	3
ENGL 2250	Survey of American Literature I	3
ENGL 2260	Survey of American Literature II	3
ENGL 2280	Survey of British Literature I	3
ENGL 2290	Survey of British Literature II	3
HUMX 1100	Introduction to Humanities	3
MUSC 1200	Music Appreciation	3
MUSC 1215	World Music	3
MUSC 1800	Popular Music: Rock, Jazz, Country, and Hip-Hop	3
MUSC 2200	Music History and Literature I	3
MUSC 2250	Music History and Literature II	3
PHIL 1500	Introduction to Philosophy	3
PHIL 2000	Comparative Religion	3
PHOT 1000	History of Photography	3
<b>Social and Behavioral Sciences</b>		
ANTH 1160	Introduction to Cultural Anthropology	3
ECON 1150	Basic Economics	3
ECON 2500	Principles of Macroeconomics	3
ECON 2600	Principles of Microeconomics	3
GEOG 1500	Introduction to Geography	3
GEOG 1600	World Regional Geography	3
HIST 1150	Western Civilization I: Antiquity Through the Reformation	3
HIST 1250	Western Civilization II: Age of Revolution Through the Present	3
HIST 2150	U.S. History: Colonization Through Reconstruction	3
HIST 2250	U.S. History: Reconstruction to the Present	3
POLS 1300	U.S. National Government	3
POLS 2500	Modern Political Ideologies	3
PSYC 1500	Introduction to Psychology	3
SOCY 1150	Principles of Sociology	3