












## Mechanical Engineering Technology (9440)

### Associate of Applied Science Degree

This concentration emphasizes the design and analysis of mechanical elements.

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 1650 or MATH 1700	College Algebra (A) <sup>3</sup> or Trigonometry	3-4
<b>Credit Hours</b>		<b>15-16</b>
<b>Second Semester</b>		
CADT 2500	Advanced SolidWorks 	3
CIMN 1160	Applied Electricity 	2
COMM 1000 or COMM 1100	Effective Public Speaking <sup>2</sup> or Effective Interpersonal Communications	3
MECT 1600	Geometric Dimensioning and Tolerancing 	2
MECT 2370	Materials Technology 	3
PHYS 1610	General Physics I <sup>4</sup>	5
<b>Credit Hours</b>		<b>18</b>
<b>Third Semester</b>		
CHEM 1500	General Chemistry I	5
MECT 2110	Engineering Mechanics I 	3
MATH 2400 or MATH 2500	Calculus for Business, Social, and Life Sciences or Calculus and Analytical Geometry I	5
Select course(s) from the Arts and Humanities Electives list		3
<b>Credit Hours</b>		<b>16</b>
<b>Fourth Semester</b>		
CIMN 2390	Fluid Power Technology 	3
MECT 2230	Strength of Materials 	3
MECT 2700	Mechanical Technology Design Capstone 	4
QENT 1200	Quality Concepts and Techniques 	2
Select course(s) from the Social and Behavioral Sciences Electives list		3
<b>Credit Hours</b>		<b>15</b>
<b>Total Credit Hours</b>		<b>64-65</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> Students may substitute either COMM 1000 Effective Public Speaking or COMM 1100 Effective Interpersonal Communications. One of these 3 credit courses may be required for students transferring to a four-year college.

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MATH 1180 Technical Mathematics I and MATH 1280 Technical Mathematics II will also transfer with additional coursework required. MATH 1650 College Algebra (A) is the prerequisite for MATH 2400 Calculus for Business, Social, and Life Sciences course. This course meets the requirements for the Mechanical Technology Design Degree (9440). MATH 1700 Trigonometry is the prerequisite for the MATH 2500 Calculus and Analytical Geometry I course. This course meets the requirements for the Mechanical Technology Design Degree (9440). The MATH 2500 Calculus and Analytical Geometry I level course is the preferred entry skill level for transfer.

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Preferred courses for transfer. PHYS 1100 Applied Physics Mechanics and PHYS 1200 Applied Physics Heat and Thermodynamics will also transfer with additional coursework required.



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