



# ENGINEERING TECHNOLOGY

## ASSOCIATE OF APPLIED SCIENCE

### MECHANICAL ENGINEERING TECHNOLOGY

#### FUEL CELL TECHNOLOGY OPTION

TECHNICAL Course Number	Course Title	Credits	Completed Sem./Year
MET123	Material Science	2	
MET124	Statics & Strength of Materials	4	
MET229	Introduction to Alternative Energy and Fuel Cells	3	
MET222	Fluid Power	4	
MET230	Analysis and Applications of Types of Fuel Cells	3	
MET225/AIT122	Manufacturing Processes or Machine Tools	3	
MET231	Fuel Cell Systems	3	
MET227	Thermodynamics and Heat Transfer	3	
MET232	Fuel Cell Project	2	
DET230	Advanced AutoCAD (Inventor)	3	
DET125	Basic AutoCAD	3	
EST130	Electrical Circuits and Devices	4	
ETD121	Engineering Technology Seminar	1	
<b>TOTAL</b>		<b>38</b>	
BASIC/RELATED Course Number	Course Title	Credits	Completed Sem./Year
ECA127	Programming Logic and Problem Solving	3	
MTH125	College Algebra	4	
MTH128	Trigonometry	1	
MTH126	Pre-Calculus	4	
MTH221/MTH223	Concepts of Calculus or Analytical Geometry-Cal I	3(4)	
PHY121	Physics I	4	
CHM141	General Chemistry I	5	
<b>TOTAL</b>		<b>24(25)</b>	
NON-TECH Course Number	Course Title	Credits	Completed Sem./Year
ENG124	College Composition	3	
ENG221	Technical Report Writing	3	
COM121/COM123	Effective Speaking or Inter-group Communications	3	
	Select one (1) Arts/Humanities/Social Science elective from the list below.	3	
<b>TOTAL</b>		<b>12</b>	
<b>TOTAL CREDIT HOURS</b>		<b>74( 75)</b>	

Arts/Humanities/Social Science Electives: ACC130, PHL122, SOC121, SOC225

FULL-TIME STUDENT - ADVISING NOTES

1. ACADEMIC ADVISING - Each student should make an appointment to see their advisor every semester before registering for classes. Please have your registration form completed, including the courses you wish to take, for this meeting.
2. COURSE SEQUENCE - The semester-by-semester listing below gives the normal scheduling option for full-time associate degree students who plan to finish in two years. Some courses can be scheduled as beginning courses in other semesters depending upon course availability and advisor's recommendation. Introduction to Algebra should be scheduled before College Algebra & Trigonometry I by those whose preadmission test indicates the need for it. Introduction to Algebra and selected technical and general studies courses are available summer term.
3. TECHNICAL ELECTIVES - Some programs provide for technical electives. Consult with your academic advisor to determine course availability.
4. BACHELOR'S DEGREE - In most of the associate degree programs, some courses may be applied toward a bachelor's degree in technology. Bachelor's degree requirements and course transferability are controlled by the institution to which the student plans to transfer. Please inform your advisor if you plan on completing a bachelor's degree after your SSCT engineering technology degree.

**MECHANICAL ENGINEERING TECHNOLOGY**

*FUEL CELL TECHNOLOGY OPTION*

<u>First Semester</u>		<u>Credit Hours</u>	<u>Prerequisite</u>
ETD121	Engineering Technology Seminar	1	-
MET123	Material Science	2	-
MET229	Introduction to Alternative Energy and Fuel Cells	3	-
DET125	Basic AutoCAD	3	-
CHM141	General Chemistry I	5	CHM101
MTH125	College Algebra	4	MTH101 or MTH103 or Test
MTH128	Trigonometry	1	Co-MTH125
PHY121	Physics I	<u>4</u>	Co-MTH125
		23	
<u>Second Semester</u>			
MET124	Statics & Strength of Materials	4	MTH125, Co-PHY121
MET225/AIT122	Manufacturing Processes or Machine Tools	3	-
ENG124	College Composition	3	ENG105 or Test
MET230	Analysis and Applications of Types of Fuel Cells	3	MET229
MTH126	Pre-Calculus	4	MTH125
ECA127	Programming Logic and Problem Solving	<u>3</u>	-
		20	
<u>Third Semester</u>			
COM121/COM123	Effective Speaking or Inter-group Communications	3	ENG124
MET222	Fluid Power	4	MET124
MET231	Fuel Cell Systems	3	MET230
DET230	Advanced AutoCAD (Inventor)	3	DET125
MTH221/MTH223	Concepts of Calculus or Analytical Geometry-Cal I	<u>3(4)</u>	MTH126
		16(17)	
<u>Fourth Semester</u>			
EST130	Electrical Circuits and Devices	4	MTH125
MET227	Thermodynamics and Heat Transfer	3	MTH125, PHY121
MET232	Fuel Cell Project	2	MET231
ENG221	Technical Report Writing	3	ENG124
	Arts/Humanities/Social Science Elective	<u>3</u>	-
		15	
<b>TOTAL CREDITS</b>		<b>74(75)</b>	

**Arts/Humanities/Social Science Electives:** ACC130, PHL122, SOC121, SOC225