

# Process Technology

CHEMISTRY/PHYSICS DEPARTMENT  
Associate in Applied Science (A.A.S.)

Process Technology is a job-oriented program, preparing students for career opportunities in all process-related industries as process technicians. Process technologies such as food, pharmaceutical, oil & gas, chemical and petrochemical, paper mills, and power generation plants all employ process technicians.

## What will students learn if they study Process Technology?

They learn how to monitor and control mechanical, physical and/or chemical changes throughout many processes to produce a final product made from raw materials. Process technicians are responsible for start up, maintenance, troubleshooting, and shutdown of process equipment.

**Upon successful completion of this program, students will know how to analyze, evaluate, and communicate process-related data, understand various processes, troubleshoot process equipment and instruments, and maintain a safe and healthy work environment.**

## Are there any requirements that must be satisfied before taking courses in my major?

Algebra I is a prerequisite for all majors. Algebra I competency may be verified with a passing score on the College's placement test or completion of the appropriate course.

## How long will it take to complete this degree?

Once students complete developmental coursework (if needed), the degree can be completed in two years of full-time study. They can shorten the amount of time by taking courses in the summer and winter sessions.

## Questions?

Contact Name: Dr. Diane Trainor, department chair

Contact Phone: 732.906.2587

Contact Email: [DTrainor@middlesexcc.edu](mailto:DTrainor@middlesexcc.edu)

Department Web: <http://www.middlesexcc.edu/academi/chm>

**PROCESS TECHNOLOGY**  
**Associate in Applied Science (A.A.S.) Degree - PRT.AAS**

*Below are required courses and recommended course groupings and sequences for program completion.*

<u>Courses</u>	<u>Credits</u>	<u>Requisites/Comments</u>
<i>Semester I</i>		
ENG 121 English Composition I	3	A passing score on the College's placement test or a grade of "C" or better in ENG 010.
CHM 117 Chemistry I	4	Appropriate score on the College's placement test of MAT 013 and one year of high school laboratory science, CHM 010 or departmental approval. Students may substitute <b>CHM 121/ CHM125 – CHM 122/CHM 126</b> for CHM 117-CHM 118 if they have completed a high school chemistry laboratory course.
MAT 107 Mathematics I	3	Appropriate score on the College's placement test, MAT 013 or MAT 013A/MAT 013B or departmental approval. Students may substitute MAT 123-MAT 124 or MAT 129-MAT 131 for MAT 107-MAT 108.
CSC 105 Computer Applications and Systems	3	
CPT 100 Introduction to Chemical Process Technology	3	
<hr/>		
<i>Semester II</i>		
<b>ENG 122 English Composition II</b>	<b>3</b>	<b>A grade of "C" or better in ENG 121</b>
MAT 108 Mathematics II	3	MAT 107
<b>ENV 220 Principles of Occupational Safety/Health</b>	<b>4</b>	<b>CHM 117 or equivalent</b>
CPT 205 Process Technology Instrumentation	3	CHM 117, CPT 100
___ ___ Physical/Health Education Elective	1-3	
___ ___ General Education Social Science Elective (GE SS)	3	
<hr/>		
<i>Semester III</i>		
SPE 121 Fundamentals of Public Speaking	3	
CPT 206 Process Technology Equipment	4	CHM 117, CPT 100
CPT 210 Process Technology Systems	4	CPT 100
PHY 101 Principle of Physics	4	MAT 107 or equivalent
___ ___ Technical Electives:	3-4	
CHM 118 Chemistry II	4	CHM 117 A continuation of CHM 117
UTI 109 Introduction to Gas Distribution	3	UTI 102
<hr/>		
<i>Semester IV</i>		
CPT 212 Process Technology Operations	4	CPT 100
CPT 214 Process Technology Quality	3	CPT 100
CPT 226 Process Technology Co-Op Ed	3	CPT 100, CPT 205
___ ___ Technical Electives:	3-4	
<b>CHM 118 Chemistry II</b>	<b>4</b>	<b>CHM 117</b> <b>A continuation of CHM 117</b>
UTI 109 Introduction to Gas Distribution	3	UTI 102

**Total Credits: 63-67**

**Contact Name: Dr. Diane Trainor, department chair**  
**Contact Phone: 732.906.2587**  
**Contact Email: DTrainor@middlesexcc.edu**  
**Department Web: <http://www.middlesexcc.edu/academi/chm>**