The Process Technology program at Middlesex County College is an industry and educational partnership to deliver skilled workers for the process industry. The New Jersey Department of Labor forecast for manufacturing employment is strong. In addition, the aging workforce has created a shortage of qualified people. At the same time, industry is demanding higher skill levels for the existing and entry positions.

Middlesex County College, located in Edison, NJ., has a history of preparing students for high tech employment. The strong faculty has industrial experience and provides training with state of the art facilities. Day and night classes are available.

Scholarship opportunities are available for those who qualify.

The two-year Associates Degree in Process Technology includes:
• Hands-on Process Operations
• Interpersonal Skills Training
• General Education Core Courses
• Internship Opportunities

For More Information on PROCESS TECHNOLOGY visit the Center for the Advancement of PROCESS TECHNOLOGY website:
www.captech.org

For more information:
Middlesex County College
2600 Woodbridge Avenue
Edison, New Jersey 08818
732-548-6000
http://www.middlesexcc.edu/

Contact Name: Dr. Diane Trainor
Contact Phone: 732.548.6000 Ext. 3573
Contact Email: DTrainor@middlesexcc.edu
Department Website:
http://www.middlesexcc.edu/academics/academic-departments/natural-sciences-homepage.html
What is a Process Technician?
A Process Technician monitors and controls mechanical, physical and/or chemical changes throughout many processes to produce a final product made from raw materials.

Some Process Technicians responsibilities include:

• Start up and shutdown equipment
• Control, monitor, and troubleshoot equipment
• Analyze, evaluate, and communicate about data
• Maintain a safe work environment.

What are some of the technical skills that are required?

• Basic Math and Science skills
• Health, Safety, and Environment
• Quality control
• Instrumentation
• Computer skills

Employers want professional workers that:

• Arrive on time
• Are good communicators
• Are team players
• Take responsibility for their actions
• Are competent problem solvers

Process Technology jobs are considered “gold collar” jobs.
A two year college degree can lead to a career with an entry level salary of as much as $50,000 a year, with the potential in some industries of earning more than $70,000 a year after three years of experience.

If you are graduating from high school or thinking about changing careers, an Associates Degree in Process Technology might be for you.

Create an Exciting Future for Yourself with a Process Technology Degree

Middlesex County College
Process Technology Program
Associate in Applied Science
PTech.AAS Course Outline

First Semester
ENG 121 English Composition I
CHM 117 Chemistry
MAT 107 Mathematics I
CSC 105 Computer Applications and Systems
CPT 100 Introduction to Chemical Process Technology

Second Semester
ENG 122 English Composition II
OR
ENG 125 English Composition II: Writing About Literature
MAT 108 Mathematics II
SCI 222 Principles of Occupational Safety/Health
CPT 205 Process Technology Instrumentation
        ___ Physical/Health Education Elective
        ___ ___ General Education Social Sciences Elective (GE SS)

Third Semester
SPE 121 Fundamentals of Public Speaking
CPT 206 Process Technology Equipment
CPT 210 Process Technology Systems
PHY 101 Principle of Physics
        ___ Technical Electives

Fourth Semester
CPT 212 Process Technology Operations
CPT 214 Process Technology Troubleshooting
CPT 226 Process Technology Co-Op Ed
        ___ Technical Electives

Industry has adopted the concept of standardization of process technology education. The Greater New Jersey Process Technology Alliance members provide support through internships and scholarships to help students acquire high-wage employment following graduation.

Companies and Industries that hire Process Technicians in New Jersey:

• Phillips 66
• Merck
• DuPont
• Chemical Industries
• Oil Refining
• Pharmaceuticals
• Utilities
• Manufacturing
• Power Generation and Alternative Energy
• Water Treatment
• Food and Beverage

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# Process Technology

**Program/Degree:** Process Technology - PRT.AAS (Associate in Applied Science)  
**Department:** DEPARTMENT OF NATURAL SCIENCES  
**Contact Information:** Contact Name: Dr. Parag Muley, department chair | Contact Phone: 732.806.2592 | Contact Email: pmuley@middlesexcc.edu  
**Credits:** 61-64 Credits Required

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Prerequisites / Comments</th>
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<tbody>
<tr>
<td><strong>Semester I</strong></td>
<td></td>
<td></td>
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<tr>
<td>ENG-121 - English Composition I</td>
<td>3</td>
<td>Prerequisites - A passing score on the College placement test or a grade of &quot;C&quot; or better in ENG 010</td>
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</table>
| CHM-117 - Chemistry I                     | 4       | Prerequisites - MAT 013 or appropriate score on the College placement test and one year of high school laboratory science or departmental approval  
Comments - Students may substitute CHM-121/ CHM-125 - CHM-122/CHM-126 for CHM-117-CHM-118 if they have completed a high school chemistry laboratory course. |
| MAT-107 - Mathematics I                   | 3       | Prerequisites - Appropriate score on the College placement test, MAT 013 or equivalent  
Comments - 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. |
<p>| CSC-105 - Computer Applications and Systems| 3       |                                                                                                                                                        |
| CPT-100 - Introduction to Chemical Process Technology | 3       |                                                                                                                                                        |
| <strong>Semester II</strong>                           |         |                                                                                                                                                        |
| ENG-122 - English Composition II          | 3       | Prerequisites - A grade of &quot;C&quot; or better in ENG 121                                                                                                   |
| MAT-108 - Mathematics II                  | 3       | Prerequisites - MAT 107                                                                                                                                  |
| SCI-222 - Principles of Occupational Safety and Health | 3       | Prerequisites - CHM 118 or equivalent                                                                                                                   |
| CPT-206 - Process Technology Equipment    | 4       | Prerequisites - CHM 117 and CPT 100                                                                                                                     |
| ___ ___ - GE Social Science Elective      | 3       | Comments - Choose one course designated in the course descriptions as General Education Social Science (GE SS).                                       |
| <strong>Semester III</strong>                          |         |                                                                                                                                                        |
| SPE-121 - Fundamentals of Public Speaking | 3       |                                                                                                                                                        |
| CPT-205 - Process Technology Instrumentation | 3       | Prerequisites - CHM 117 and CPT 100                                                                                                                     |
| CPT-210 - Process Technology Systems      | 4       | Prerequisites - CPT 100                                                                                                                                    |
| PHY-101 - Principles of Physics           | 4       | Prerequisites - MAT 107 or equivalent                                                                                                                   |
| ___ ___ - Physical/Health Education Elective | 1-3    |                                                                                                                                                        |
| <strong>Semester IV</strong>                           |         |                                                                                                                                                        |
| CPT-212 - Process Technology Operations   | 4       | Prerequisites - CPT 100                                                                                                                                    |
| CPT-214 - Process Technology              | 3       | Prerequisites - CPT 100                                                                                                                                    |</p>
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<tr>
<td>CPT-216 - Process Control</td>
<td>4</td>
<td>Prerequisites - CPT 100, PHY 101, CHM 117</td>
<td></td>
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<tr>
<td>___ ___ - Technical Elective</td>
<td>3-4</td>
<td>Comments - Select from one of the following Technical Electives: &lt;br&gt; CPT-226 - Process Technology Cooperative Education &lt;br&gt; CHM-118 - Chemistry II &lt;br&gt; SCI-155 - Introduction to Geology &lt;br&gt; SCI-217 - Environmental Health Hazards</td>
<td></td>
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