



Work Process Schedule

Process Technician/Process Control Operator	
Job Description: Control or operate entire chemical processes or system of machines.	
RAPIDS Code: 0393CB	O*NET Code: 51-8091.00
Estimated Program Length: 4 Years	
Apprenticeship Type: <input checked="" type="checkbox"/> Competency-Based <input type="checkbox"/> Time-Based <input type="checkbox"/> Hybrid	

Suggested On-the-Job Learning Outline

Monitor instruments to ensure proper production conditions.		
Competencies	Date Completed	Initial
A. Monitor recording instruments, flowmeters, panel lights, or other indicators and listen for warning signals to verify conformity of process conditions.		

Operate chemical processing or water treatment systems or equipment.		
Competencies	Date Completed	Initial
A. Regulate or shut down equipment during emergency situations, as directed by supervisory personnel.		
B. Control or operate chemical processes or systems of machines, using panelboards, control boards, or semi-automatic equipment.		
C. Move control settings to make necessary adjustments on equipment units affecting speeds of chemical reactions, quality, or yields.		

Inspect production equipment.		
Competencies	Date Completed	Initial
A. Inspect operating units, such as towers, soap-spray storage tanks, scrubbers, collectors, or driers to ensure that all are functioning and to maintain maximum efficiency.		

Collect samples of materials or products for testing.		
Competencies	Date Completed	Initial
A. Draw samples of products and conduct quality control tests to monitor processing and to ensure that standards are met.		

Test chemical or physical characteristics of materials or products.		
Competencies	Date Completed	Initial
A. Draw samples of products and conduct quality control tests to monitor processing and to ensure that standards are met.		

Monitor equipment fluid levels.		
Competencies	Date Completed	Initial
A. Patrol work areas to ensure that solutions in tanks or troughs are not in danger of overflowing.		
B. Gauge tank levels, using calibrated rods.		

Adjust equipment controls to regulate flow of production materials or products.		
Competencies	Date Completed	Initial
A. Turn valves to regulate flow of products or byproducts through agitator tanks, storage drums, or neutralizer tanks.		

Record operational or production data.		
Competencies	Date Completed	Initial
A. Record operating data, such as process conditions, test results, or instrument readings.		

Analyze test results.		
Competencies	Date Completed	Initial
A. Interpret chemical reactions visible through sight glasses or on television monitors and review laboratory test reports for process adjustments.		

Confer with others to resolve production problems or equipment malfunctions.		
Competencies	Date Completed	Initial
A. Confer with technical and supervisory personnel to report or resolve conditions affecting safety, efficiency, or product quality.		

Notify others of equipment repair or maintenance needs.		
Competencies	Date Completed	Initial
A. Notify maintenance, stationary engineering, or other auxiliary personnel to correct equipment malfunctions or to adjust power, steam, water, or air supplies.		

Operate pumping systems or equipment.		
Competencies	Date Completed	Initial
A. Start pumps to wash and rinse reactor vessels, to exhaust gases or vapors, to regulate the flow of oil, steam, air, or perfume to towers, or to add products to converter or blending vessels.		

Estimate material requirements for production.		
Competencies	Date Completed	Initial
A. Calculate material requirements or yields according to formulas.		

Repair production equipment or tools.		
Competencies	Date Completed	Initial
A. Repair or replace damaged equipment.		
B. Defrost frozen valves, using steam hoses.		

Replace worn equipment components.		
Competencies	Date Completed	Initial
A. Repair or replace damaged equipment.		

Direct operational or production activities.		
Competencies	Date Completed	Initial
A. Direct workers engaged in operating machinery that regulates the flow of materials and products.		
B. Supervise the cleaning of towers, strainers, or spray tips.		

Suggested Related Instruction Outline

Provider	
Name:	
Address:	
Email:	Phone Number:
Suggested Related Instruction Hours: X	

*CIP Code	Course Title	Contact Hours
41.0301	Chemical Technology/Technician	
41.0303	Chemical Process Technology	
Total		

*If related course number data are available, information displayed includes the Classification of Instructional Programs (CIP) code that best represents the field of study, course, or program. CIP provides a taxonomic scheme that supports the accurate tracking and reporting of educational programs. CIP is developed and maintained by the U.S. Department of Education.