Chemical processing technician

Keeps chemical processes running safely, consistently and to specification, working between the control room and the production area with digital control panels.



REQUIRED COMPETENCES

Score out of 10 · highlighted bars mark the top scores (9)

Human-centric collaboration skills 7
Works closely with operators and engineers

Green skills and sustainability awareness 8
Helps reduce waste and optimise resource use

Digital fluency and critical thinking 9
Uses digital control systems to monitor processes

Logic thinking and problem-solving 9
Responds to process deviations and system alerts

Adaptability and resilience 8
Responds to changing production conditions

Emotional intelligence and empathy 6
Maintains communication in high-pressure situations

Multicultural teamwork and conflict management 6
Works with diverse teams on shared production goals

Creativity and innovation 7
Suggests improvements to prevent recurring failures

Digital ethics and responsibility 7
Handles production data responsibly

Ethical awareness and professional responsibility 9
Ensures safety and compliance in all maintenance work

DAY-TO-DAY TASKS

1. Monitor production processes using digital control systems
2. Check temperature, pressure and flow levels
3. Conduct routine checks of equipment and materials
4. Take samples for quality testing
5. Record production data and observations
6. Communicate deviations with the team
7. Follow safety and operational procedures

CHALLENGES

1. Monitoring multiple process values simultaneously
2. Responding quickly to process deviations
3. Following strict safety procedures
4. Maintaining accuracy in reporting
5. Working in shift-based production environments
6. Keeping up with digital and technological changes

CAREER OPPORTUNITIES

Step up	With further education	Move sideways	Upskill in
Senior process technician	Process engineer	Quality control	Data analysis
Control room specialist	Plant coordinator	Safety coordination	Automation
Production supervisor		Environmental monitoring	Process optimisation

ALIGNMENT WITH PROCESS INDUSTRIES

Fits 7 of 8 sectors

- ✓ Chemical & petrochemical
- ✓ Pharmaceuticals
- ✓ Petroleum refining
- ✓ Mining & metal production
- ✓ Mineral & material industries
- ⊖ Forest industries: no
- ✓ Food & beverage
- ✓ Utilities

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Lead partner for this avatar: **PENDIK**

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