# PROCESS OPERATOR

**ALSO KNOWN AS:** PLANT OPERATOR | PRODUCTION ASSISTANT (MANUFACTURING)

## MASTER THE ART OF TRANSFORMATION TO DEVELOP CONSUMER PRODUCTS.

Master the art of transformation as you balance automation and hands-on control to develop consumer products. As a Process Operator you will transform raw materials into essential products through precise "recipes" and cutting-edge technology. As a specialist in complex machinery, you'll control and optimise complex equipment, ensuring each production step meets exact specifications. Your hands-on expertise will be crucial in creating a wide spectrum of products – from refreshing beverages to life-saving pharmaceuticals and innovative industrial materials.

### KEY SKILLS

Skills which may benefit anyone considering a job as a process operator include:

- Analytical skills
- Communication skills
- Problem solving
- Safety conscious
- Technical proficiency

### VALUES & ATTRIBUTES

Values and attributes of anyone considering a job as a process operator include:

- Attention to detail
- Continuous learning
- Resilient
- Team Player
- Reliable
- Realistic – "Do-er"

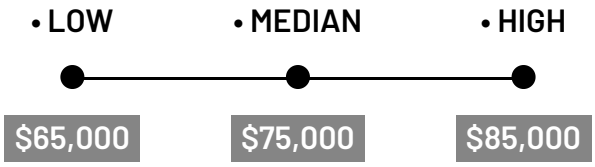
### CAREER PROGRESSION

In this role, you may have the opportunity to progress to other positions. Career progression opportunities include:

- Team Leader
- Production Operator
- Production Planner
- Plant Technician

### SALARY EXPECTATION

The expected salary for a Process Operator can vary across different areas of manufacturing and may vary as you become more experienced.




### RELATED INDUSTRIES

- Chemicals, Hydrocarbons and Refining

### RECOMMENDED SCHOOL SUBJECTS

- Engineering Skills
- Furnishing Skills
- Industrial Technology Skills
- Science in Practice

### CORE SCHOOL SUBJECTS

- Essential Mathematics
- Essential English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## JOB OVERVIEW

As a Process Operator, you'll be at the heart of process manufacturing, a production method that creates goods by combining supplies, ingredients, or raw materials using predetermined formulas or "recipes." This approach is frequently employed in industries where products are produced in bulk through a series of sequential steps. Your responsibility will be to monitor, control, and optimise sophisticated manufacturing systems and equipment, ensuring that each step is completed under specific conditions of heat, time, and pressure.

You'll be hands-on with machinery, performing tasks ranging from setup and operation to troubleshooting and routine maintenance. Your expertise will be crucial in maintaining production flow, ensuring product quality, and meeting production schedules. In process manufacturing, one step must be completed before the start of the next, often resulting in thermal or chemical conversions that are irreversible. This means the end products you'll be creating – such as soft drinks, plastics, or refined fuels – cannot be disassembled into their constituent parts.

In this role, you'll work with a diverse array of advanced machinery and equipment, including industrial mixers, reactors, distillation columns, centrifuges, and high-pressure pumping systems. Depending on your specific industry, you might operate sophisticated packaging lines, sterilisation equipment, or precision measurement devices. You'll be involved in producing a wide range of products, from food and beverages to pharmaceuticals, chemicals, plastics, and refined petroleum products. Your expertise will be crucial in managing the production of everything from everyday consumer goods like soft drinks and personal care items to specialised industrial materials and life-saving medications.

## WHAT WILL YOU DO?

Your role may include duties as follows:

1. Control and monitor production machinery to ensure optimal performance and output quality
2. Adjust machine settings and production parameters to maximise efficiency and product quality
3. Perform routine equipment inspections and resolve operational issues promptly
4. Conduct regular quality checks and ensure adherence to product specifications
5. Enforce and adhere to workplace health and safety regulations and procedures

## HOW TO BECOME A PROCESS OPERATOR

Becoming a process operator typically requires a combination of education and practical experience.

To prepare for a career as a process operator you should aim to complete your Year 10 secondary education. Completing Years 11 and 12 will also provide a good foundation and give you access to information through school subjects, teamwork opportunities, and building communication skills.

While completing high school is often sufficient, some employers may prefer candidates with a vocational education and training certificate. Gaining hands-on experience is crucial, which can be achieved through entry-level positions like production assistant or machine operator. If you have an interest in becoming a process operator you can apply directly to an employer.

Research potential employers in your area via a search engine, social media or job site. Even if there are no jobs advertised with the employer you're interested in, it can be a good idea to send a cover letter with your resume expressing your interest.


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# VOCATIONAL EDUCATION & TRAINING

If you are seeking employment in one of the three following process manufacturing industries – chemical, hydrocarbons and refining, plastics, rubber and polymers or manufactured mineral products you can undertake a traineeship:

- Certificate II in Process Manufacturing (MSM20116)
- Certificate III in Process Manufacturing (MSM30116)

As a trainee you will combine work with formal training, allowing you to gain practical skills and knowledge in a specific industry while earning a salary.

**Duration:** Traineeships typically last between 12 to 24 months, depending on the specific program and whether you are working full-time or part-time.

**Work and study combination:** As a trainee, you will work either full-time or part-time while receiving formal training from a Registered Training Organisation (RTO).

**Eligibility:** Generally, traineeships do not require formal qualifications to enter, making them accessible to a wide range of individuals, including if you are a school leaver or someone looking to change careers.

**Completion:** On completion you will receive a nationally recognised qualification, showcasing your skill and experience.

**Skills, qualifications, accreditations and licences**

As a Process Operator you may choose to pursue other training or certifications, licences and tickets. Qualifications and skills may be required to progress to supervisor or team leader positions.

Qualifications that may help you advance in your career include:

- Certificate IV in Process Manufacturing (MSM40116)

# UNIVERSITY & HIGHER EDUCATION

While not typically required for entry-level positions, the following degrees can be beneficial for career advancement:

- Bachelor of Chemical Engineering
- Bachelor of Chemical Process Engineering
- Bachelor of Science (Chemistry)

Holding a degree in human resources, finance, economics, marketing or management can be helpful if you are considering taking a step into leadership or a business ownership position.


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