



Careers in manufacturing: laboratory operations

Operations

This information sheet covers the following occupations within the laboratory operations sector:

- **Laboratory/technical assistant**
- **Sampler/tester**
- **Technical assistant**
- **Technical officer**
- **Laboratory supervisor.**

Laboratory/technical assistant (construction materials)

Laboratory assistants perform straightforward sampling and testing. They follow set procedures and recipes, and apply well-developed technical skills and basic scientific knowledge. The majority of their work involves a predictable flow of parallel or similar tasks within one scientific discipline.

For example, a laboratory/technical assistant working in construction materials testing receives and prepares soil samples for classification testing.

Relevant qualification:

- Certificate III in Laboratory Skills (Construction Materials Testing)

Sampler/tester

Samplers and testers conduct limited sampling and testing as part of their duties in their particular industry. In some industry sectors (for example, mineral assay) this work forms a whole job role. They apply a restricted range of skills and operational knowledge to perform these tasks and do not generally work inside a laboratory.

Relevant qualification:

- Certificate II in Sampling and Measurement

Technical assistant (mineral assay laboratory)

Technical assistants undertake a wide range of sampling and testing that requires the application of a broad range of technical skills and some scientific knowledge. Although technical assistants generally work in a laboratory, they often work closely with other personnel throughout the workplace. The work of technical assistants involves similar tasks within one scientific discipline with occasional peak periods and some interruptions.

Relevant qualification:

- Certificate IV in Laboratory Techniques (Mineral Assay)

Technical officer (biotechnology, calibration and pathology testing)

Technical officers conduct a wide range of sampling and testing that requires the application of broad scientific-technical knowledge and skills, with substantial depth in some areas. Although technical officers generally work in a laboratory, they often work closely with personnel in other teams within a section of the workplace.

Relevant qualification:

- Diploma of Laboratory Technology

Technical officer (biotechnology)

A technical officer working in a biotechnology laboratory prepares, maintains and preserves cells and cell lines for the large scale production of monoclonal antibodies.

Relevant qualification:

- Diploma of Laboratory Technology

Technical officer (calibration)

A technical officer working in a biotechnology laboratory prepares, maintains and preserves cells and cell lines for the large scale production of monoclonal antibodies.

Relevant qualification:

- Diploma of Laboratory Technology

Technical officer (pathology)

Technical officers who work in pathology laboratories perform a range of tests on body tissues and fluids to measure quantities such as the amount of biological substances. They also prepare cultures, stained tissue sections and thin films to count and classify cells, bacteria and parasites.

Relevant qualification:

- Diploma of Laboratory Technology

Senior technician/laboratory supervisor

Senior technicians or laboratory supervisors are generally responsible for the planning, allocation of tasks, coordination, quality assurance, and recording and reporting of laboratory outputs within their section. This requires significant judgement about work sequences, choice of appropriate technology and procedures to ensure that products and services meet customer expectations and are provided safely and efficiently in keeping with enterprise business plan. Under broad direction from scientists/medical staff/engineers the senior technician/supervisor accepts responsibility for the day-to-day operation of his/her work/functional area.

Relevant qualification:

- Advanced Diploma of Laboratory Operations

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