

# Hydrogeologist

ANZSCO: 234413

Group A

## About this document

- The following Information Sheet is for your reference only and should be used as a guide to assist with your Skills Assessment application to VETASSESS. This information is subject to change.
- Please note that a Skills Assessment of the qualification involves assessment of both the qualification level and content. Qualifications are assessed according to the guidelines published by the Australian Government Department of Education.
- The employment assessment involves determining the skill level and relevance of the tasks undertaken.
- Integrity checks may be conducted to verify the qualification and employment claims made in an application.

## Job description

Hydrogeologists study the distribution, availability, flow and quality of underground water. They are responsible for designing, analysing and evaluating all aspects of water assessment and management for surface and underground operations. Their work can vary from the provision of comprehensive assessments of groundwater resources to practical engineering solutions for mining projects. Onsite investigations and monitoring carried out by Hydrogeologists consist of the design and implementation of water quality assessments, groundwater investigations, and the development of conceptual and numerical hydrogeological models. Hydrogeologists generally work as part of a larger team in providing water services to clients in the mining, construction, oil and gas, agricultural/farming, as well as government and community sectors.

# Hydrogeologist is a VETASSESS Group A occupation

This occupation requires a qualification assessed as comparable to the educational level of an Australian Qualifications Framework (AQF) Bachelor degree or higher, in a field highly relevant to the nominated occupation.

GROUP A	Criteria for a positive Skills Assessment				
	Comparable Bachelor degree AQF level	With highly relevant major field of study	Relevant employment duration		
1		+		+	
Pre-qualification methodology does not apply to Group A occupations					

The information below describes the available pathways for a Skills Assessment under **Group A**. Please note that in order to achieve a suitable Skills Assessment Outcome, a suitable assessment for both qualifications and employment is required.

## Pathway 1

This pathway requires a qualification assessed as comparable to the education level of an Australian Qualifications Framework (AQF) Bachelor degree or higher degree and in a field highly relevant to the nominated occupation.

Bachelor degree or higher degree includes AQF Master Degree or AQF Doctoral Degree.

In addition, it is essential for applicants to meet the following employment criteria:

- at least **one** year of post-qualification employment at an appropriate skill level, undertaken in the last five years,
- working 20 hours or more per week, and
- highly relevant to the nominated occupation.

## Qualification

This occupation requires a qualification assessed as comparable to the education level of an Australian Qualifications Framework (AQF) Bachelor Degree or higher degree and in a field highly relevant to the nominated occupation.

Highly relevant field of study include:

- Hydrogeology, which is the branch of geology that deals with the occurrence, distribution, movement and effect of groundwater. A major in pure Geology would generally be considered highly relevant.

Fields of study in water resources engineering, environmental science or other related subjects with additional postgraduate studies in hydrogeology from a recognised tertiary institution will also be considered.

## Employment Criteria

Highly relevant tasks include:

- Perform laboratory and field studies, and aerial, ground and drill hole surveys
- Perform hydrogeological site characterisations
- Provide water resource assessments and modelling
- Analyse and interpret geological, aquifer testing and water quality data for groundwater model development
- Design and implement field sampling programs including groundwater, surface water, soil, and sediments
- Interpret maps and geographical data, historical evidence and models to build up a picture of the groundwater regime or land contamination
- Acquire accurate manual and automated groundwater level measurements, including preparation and maintenance of field instrumentation
- Provide oversight of drilling contractors for environmental and water supply projects
- Manage and analyse data and prepare clear, concise and effective technical reports

It is essential for applicants to meet the following employment criteria:

- at least one year of post-qualification employment at an appropriate skill level,
- undertaken in the last five years,
- working 20 hours or more per week, and
- highly relevant to the nominated occupation.

Please note in order to achieve a successful Skills Assessment Outcome, a positive assessment for both qualifications and employment is required.