

Surveying Technician



Alternate title Cartographic Drafter, Tracer; Surveying Associate; Technician (Surveying)

Description Surveying technicians collect and analyse information and prepare plans for land surveyors and related professionals. They provide the basic information required for land development and redevelopment, such as road-building and infrastructure projects, identification of boundaries, natural and man made features. They also set out the alignment for new works including building construction and land subdivision.

In addition the information prepared by survey technicians supports a range of professions such as emergency services, military, hydrography, environmental and engineering.

Surveying technicians work indoors and outdoors, may be required to travel, work in both rural and urban environments.

- Typical duties**
- gather field data for the preparation of maps & plans showing natural and man made features such as water courses, topography, location of existing buildings, roads and property boundaries.
 - collect and analyse source maps, survey data, aerial photographs, satellite imagery, computer records and other information;
 - process measurements and information about land (using computers);
 - draw up plans by recording information, making calculations and plotting information by manual or on a computer using CAD (computer-aided design);
 - prepare plans for the sub-division of land;
 - operate and manage computer systems that record land information data;
 - carry out computations associated with land measurement;
 - take measurements and make observations from aerial photographs;
 - store data in geographic information systems (GIS) and produce data for enquiries, reports and analysis;
 - set out survey marks to locate the position of new construction works eg. Roads, buildings, land boundaries;
 - record measurements associated with management of natural resources and mining activities

- Personal requirements**
- normal colour vision;
 - technical aptitude;
 - aptitude for mathematics, science and computers;
 - ability to supervise small teams of workers;
 - ability to work accurately and neatly;
 - able to work as part of a team.



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- Qualification**
- Diploma in Spatial Information Services (GIS)
 - Advanced Diploma of Spatial Information Services

Entry pathway To become a Surveying Technician you usually have to complete a diploma or advanced diploma in spatial information services. Entry to these courses usually requires completion of Year 12 with mathematics or mathematical methods. As subjects can vary between institutions, you should contact your chosen institution for full details.

Experience in off-road vehicle driving may be an advantage.

Job prospects Surveying Technicians are employed across several industries including: Building Construction; Technical Services; Government Administration; and Non-Building Construction.

The vacancy level for Surveying Technicians is average. Vacancies arising from job changing (Surveying Technicians changing employers) are expected to provide 46 per cent of vacancies, compared with 48 per cent from job openings (Surveying Technicians leaving the occupation) and 6 per cent from new jobs

Specialisation Surveying technicians may specialise in surveying, survey drafting, land information, photogrammetry, remote sensing, hydrographic surveying, mining surveying, land development, spatial information systems, or engineering and construction surveying.

- Related Jobs**
- Cartographic Technician
 - Civil Engineering Technician
 - Geoscience Technician
 - Hydrographic Technician
 - Science Field Officer

- Further information**
- Institution of Surveyors [www.isaust.org.au/]
 - Spatial Sciences Institute (Head Office) [www.spatialsciences.org.au/]
 - Geoscience Australia [ga.gov.au]
 - Australian Spatial Information Business Association (National Office) [www.asiba.com.au/]