

# What can I do with my TAFE qualification? Science



\*\* Please note – the information contained in this handout is accurate as at January 2011. Information regarding employment prospects/salary/growth is based on information derived from [www.skillsinfo.gov.au](http://www.skillsinfo.gov.au), [www.joboutlook.gov.au](http://www.joboutlook.gov.au) and Careers and Employment's own research.

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Please note: the information contained in this document was current as of January 2011. Refer to [www.swinburne.edu.au/courses/](http://www.swinburne.edu.au/courses/) for the most recent updates. Refer to the School of Science website [www.tafe.swinburne.edu.au/science/](http://www.tafe.swinburne.edu.au/science/) for further information and a list of the courses offered in this area.

## Industry Overview

TAFE courses in science allow you to do more than simply keep up with the pace of scientific and technological change, it sets you on a career path of inquiry and discovery. Ultimately, you will be able to branch out into the scientific discipline that suits you best. But before you enter the workforce, a TAFE qualification in science will provide an industry-relevant grounding in areas such as public safety, laboratory technology, forensic science and fire technology.

Career paths in the science industry vary markedly according to the specific area of professional activity. A common factor is that education and training levels are very high in comparison to other industry sectors. To be employed as a laboratory worker, the completion of some further study of a vocational nature, such as a Diploma or an Advanced Diploma, is appropriate.

Swinburne University of Technology's TAFE division delivers a number of science-based courses that are well regarded by industry. Students can study Public Safety, Laboratory Technology (Biotechnology), Laboratory Operations and Fire Technology.

For further market and industry information relating to your discipline, please refer to:

- [www.deewr.gov.au](http://www.deewr.gov.au)
- [www.jobguide.deewr.gov.au](http://www.jobguide.deewr.gov.au)
- [www.joboutlook.gov.au](http://www.joboutlook.gov.au)
- [www.myfuture.edu.au](http://www.myfuture.edu.au)
- [www.skillsaustralia.gov.au](http://www.skillsaustralia.gov.au)
- [www.skillsinfo.gov.au](http://www.skillsinfo.gov.au)

## Fire Technology/Fire Fighting Operations

A course in Fire Technology equips students with the technical skills and knowledge and to train practitioners and designers to work with engineers and related professionals in the development, commissioning, monitoring and assessment of fire protection systems for buildings practices. Prospects for Safety Officers are currently good and expected to remain steady over the next five years

A qualification in Public Safety (Fire Fighting Operations) is designed to further develop knowledge and skills in fire fighting. Students undertaking this course will ideally be currently engaged in fire fighting activities in the community or workplace. The course will require access to a suitable workplace environment, which includes a supportive workplace coach or mentor to supervise aspects of learning on the job. Student's who have completed this qualification may find careers in the fire fighting industry. Employment prospects for Fire and Emergency workers are average and are expected to grow moderately during 2012-2015.

Job titles for Fire Technology/Public Safety may include the following:

- Essential Services Officer/Worker
- Fire Fighter/Emergency Worker
- Fire Inspection/Testing Technician
- Fire Safety Officer
- Fire Systems Designer/Technician

### **Laboratory Technology**

Laboratory Technology courses can have a general focus or students can elect to specialise in certain fields such as biotechnology, forensics and pathology. Courses encompass a wide range of skills, techniques, and processes, so that graduates are adaptable and competent to meet the technological and administrative demands of a changing laboratory workforce. Employment may be gained as laboratory technicians, technical officers or medical technicians, working independently or under supervision in industrial, research, pathology or educational laboratories.

Many laboratory technicians/operators work in hospital laboratories. Other places of employment are public health laboratories, reference laboratories, biomedical companies, universities, industrial medical laboratories, pharmaceutical companies and forensic medicine. Current job prospects for Science Technicians are average; however, employment for Science Technicians to 2014-15 is expected to grow strongly.

Laboratory Operations studies provide a broad and flexible package of competencies which meet the needs of laboratory personnel across many industries. Graduates may be employed in positions such as sampler/tester working in manufacturing or in a field environment, laboratory/technical assistant working in construction materials testing, laboratory assistant working in a food company, technician working in a mineral assay laboratory, technical assistant working in environmental monitoring, technical officer working in biotechnology, calibration technician and so forth.

Job titles may include the following:

- Assistant Practitioner (Science/Multimedia)
- Chemical Process Operator
- Computer Technician
- Laboratory Manager/Attendants
- Medical Laboratory Technicians
- Research Assistant
- Retail Pharmacist
- Sampler/Tester
- Science Technicians
- System Analyst
- Technical Assistant/Officer

### **Laboratory Technology/Sustainability**

A dual award in Laboratory Technology and Sustainability provides students with the opportunity to graduate with a qualification in laboratory technology and, in the latter part of their studies, to gain a second qualification in sustainability. Sustainability is increasingly being recognised as a core objective in both business and government. Students will develop an understanding of these issues as they relate to the sciences and will be able to apply principles of sustainability in laboratory work. Graduates may gain employment in various support roles to scientists in research, education and within industry.

### **Further Education and Pathways**

For a full list of credit pathways and requirements, see the Swinburne website:

[www.future.swinburne.edu.au/pathways](http://www.future.swinburne.edu.au/pathways)

For entry and admission requirements: [www.swinburne.edu.au/courses](http://www.swinburne.edu.au/courses)

## References and Relevant Websites

- [www.joboutlook.gov.au](http://www.joboutlook.gov.au)
- [www.myfuture.com.au](http://www.myfuture.com.au)
- [www.mshealthcareers.com](http://www.mshealthcareers.com)

## What help does Swinburne Careers and Employment offer?

### Career Services

- Career Counselling for Students
- Plan Skills Development
- Career Seminars/Workshops for Students
- Resume and Cover Letter Checks daily at Hawthorn 1:30pm-2:30pm, please refer to website for other campus days.
- Interview Practice daily at Hawthorn at 3:00pm sharp, please refer to website for other campus days.

### Career Resources

- Career Resource Library
- Job Search Handouts
- Interactive Career Planning
- What Can I Do With TAFE Qualification/My Degree? (see website for resource)

### SwinEmploy Employment Service

- All job advertisements for graduate placements, casual, vacation, part-time and full-time employment
- Links to employer websites
- Enables students to book online for events such as workshops, employer information sessions and interviews
- Access to Going Global (over 10,000 job vacancies listed across Europe, Asia-Pacific, UK and US. Global key employer directories, work permits & visa regulations, country-specific cultural & interviewing advice & more)

### Download Careers and Employment job search handouts from SwinEmploy, including:

- Addressing Selection Criteria
- Assessment Centres
- Cover Letters or Letters of Application
- Curriculum Vitae or Resume
- Employer Expectations of Graduates
- Interviews - How to Plan, Prepare and Perform
- Informational Interviewing
- Job Hunting
- Networking: What Is It and How Do You Do It?
- Online Applications
- Psychometric Tests
- Skills and Attributes
- Thinking About Changing Your Course?
- Tips for Facing the Work Environment and Your First Professional Job

#### Careers & Employment

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