

Engineering Technology Programs

Accredited by

Engineers Australia

(Last updated 19 January 2012)

Introduction

Accreditation of Australian Engineering Technology Programs

The Institution of Engineers Australia, now trading as Engineers Australia, evaluates undergraduate engineering education programs conducted by Australian universities and accredits those that meet the academic requirements for Engineers Australia membership at the level of Engineering Technologist. Universities are not obliged to submit programs for accreditation.

In 1965 the Institution's then Board of Examiners determined that program assessment procedures should include visits by expert panels. This marked the origin of procedures employed today, and all programs accredited from 1966 onwards have been assessed on a comparable basis.

The list of accredited programs does not predate 1980. Details of accredited programs prior to this date and of programs no longer offered are available from the Education and Assessment Team at Engineers Australia's National Office.

Following a major review of engineering education in Australia in 1996, Engineers Australia revised its accreditation procedures in 1997 and again in 1999. The *'Manual for the Accreditation of Professional Engineering Programs'* was published by the Institution of Engineers in 1999 and outlined the policy, criteria and requirements for accreditation. This definitive document was redeveloped in 2004 as a modular system of controlled documents, and grouped together as the Engineers Australia *'Accreditation Management System'* abbreviated as the AMS. A separate AMS document set has been developed for programs at the level of Professional Engineer as well as for programs at the level of Engineering Technologist. The AMS series of documents (in PDF format) is available for down loading from the Engineers Australia Website (www.engineersaustralia.org.au) under the tab 'Membership' and then 'Accreditation'. All programs accredited by Engineers Australia since 2004 are assessed in accordance with the criteria and requirements set down in the AMS.

Accreditation normally requires evaluation of programs by a visiting panel. The Engineers Australia Accreditation Board is the governing body which considers the recommendations of panels and accords accreditation as appropriate. A general review process requires educational institutions to submit their full range of engineering program offerings for accreditation on a normally 5-year cyclic basis.

List of Accredited Programs

The Engineers Australia accreditation criteria are based on the key assessment measures that are necessary to establish with confidence, that graduates will be equipped with the competencies defined in Engineers Australia Stage One Competency Standards.

The following list provides details of programs accredited by Engineers Australia. Programs are listed under the educational provider and in alphabetical order of specialisation.

The year shown after each program is the year in which that particular program was first accredited by Engineers Australia. After the name of the educational institution, appears the year in which its next general review is scheduled. The accreditation term for a fully accredited or provisionally accredited program will be from the indicated first year of accreditation up to and including the year of the next general review. The accreditation period is usually extended to the first intake of students in the year

following the next scheduled general review to provide a safety margin for processing of outcomes via the Accreditation Board. Discontinued programs are clearly identified by displaying a final year of accreditation, thus setting the accreditation term.

Students are deemed to have graduated from an accredited program providing they commence and complete their studies within the period that ongoing, full accreditation applies. A student admitted to a fully accredited program can thus expect their degree to be recognised by Engineers Australia and also by the signatories to the Sydney Accord. Where full accreditation is terminated by Engineers Australia after the commencement, but prior to the completion of a student's candidature, once satisfying graduation requirements the graduate will still be deemed to have graduated from an accredited program, provided there was no substantive break in the sequence of study. Accreditation terminating dates are set after careful consideration of program wind-down arrangements and with due reference to current student cohorts.

New programs will be accorded provisional accreditation based upon evaluation during the early years of implementation. Once the first sizeable cohort of students graduate from the program, then arrangements should be made to consider the program for full accreditation. On the website listing provisional accreditation is denoted by (P) after the commencement date, and indicates that full accreditation is expected but not guaranteed. Once the program is found to satisfy the full accreditation requirement, the (P) indicator will be removed from the website listing and full accreditation is normally accorded from the same start date that applied for provisional accreditation. Full accreditation is necessary for the recognition of graduates for the purposes of Engineers Australia membership and for Sydney Accord equivalence.

Programs may be implemented using a range of modes and pathways such as full-time or part-time, on-campus study, cooperative education modes, mixed mode distance education (external mode), delivery via a branch campus within Australia or overseas, and major or minor elective study options. A number of such implementation pathways may be offered simultaneously. All possible implementation pathways for a host program of study must be separately evaluated and be found to satisfy the accreditation criteria if the overall program is to attain or retain accreditation. This is particularly important in the case of a program being implemented simultaneously, and in an undifferentiated format, on both the home campus and at a branch campus. Under Engineers Australia policy, all programs which are delivered in external or distance education mode, require minimum defined periods of on-campus attendance.

Degree Titles

The degree title for all accredited programs is normally Bachelor of Technology, Bachelor of Engineering Technology or Bachelor of Engineering Science, abbreviated as BTech, BEngTech or BEngSc respectively, unless otherwise shown. In some cases, a generic degree title only will appear on the degree testamur with the specialisation not shown. An Honours degree in Engineering in Australia reflects a student's performance in the program as a whole, and accreditation does not distinguish between Pass and Honours levels. Engineers Australia accredits a Master's degree only if it provides an articulation pathway through to a Professional Engineer qualification, and is thus designed to deliver graduates fit for commencement of practice as a Professional Engineer.

Dual degrees

Some educational institutions offer engineering technologist programs combined with a first degree in another discipline, for example Bachelor of Business. Also there is the possibility of combining two engineering technologist programs. Terminologies and formats differ; the terms 'double', and 'combined' degrees sometimes refer to the same concept, but in other cases may have slightly different meanings. In almost all instances, by merging the separate requirements, the program allows the two degrees to be completed jointly in substantially less time than would be needed to complete them separately.

In most cases separate degree testamurs will be awarded for the two program disciplines, but a joint or combined testamur can apply in specific circumstances.

In this listing, the term 'dual degrees' is used to cover all such combinations. Engineers Australia accredits such programs, (where appropriate), as meeting the requirements for an engineering technologist degree, on the same basis as a single engineering technologist program. The level of accreditation is the same as that of the particular engineering program/s with which the dual degree is associated. In the case of a combination of two degrees at the level of engineering technologist, each in a designated field of engineering, the accreditation policy and criteria must be fully satisfied for each separate outcome. Only currently accredited dual degree combinations are referenced on the website. Other combinations may have been offered and accredited in the past.

Programs Offered Outside Australia

Engineers Australia is a full signatory to the Sydney Accord agreement. The signatories have exchanged information and examined respective policies, processes and practices for granting accreditation to programs at the level of engineering technologist and have agreed that these are comparable. This agreement ensures that the substantial equivalence of engineering programs accredited by a particular signatory is recognised by other signatories. A listing of programs accredited by signatories to the Accord is thus a useful resource to bodies responsible for the registration or licensing of professional engineers in a signatory jurisdiction.

A number of Australian universities implement engineering education programs on both the home campus as well as at offshore locations through international partnerships or wholly owned overseas campuses. Engineers Australia will consider for accreditation programs implemented by Australian universities at offshore locations, where the resulting degree is an award of the Australian University. Such accreditation is accommodated within the scope of the Sydney Accord where the off-shore implementation of a program is undifferentiated from the equivalent home campus offering.

A number of Australian universities have negotiated feeder or twinning programs with offshore institutions. Where the final 1.5 or more years of the program must be completed at the Australian campus, the feeder arrangement is considered to be part of the home program. Where less than 1.5 years are taken at the home campus, Engineers Australia expects to identify and accredit the feeder program separately. In most cases separate degree testamurs will be awarded for the two program disciplines but a joint or combined testamur can apply in specific curriculum.

Engineers Australia does not accredit programs leading to degrees awarded by universities that are not based in Australia.

Specific accreditation arrangements pertaining to offshore offerings are provided adjacent to the listed programs for the host institution's headquarters campus in Australia.

ACCREDITED ENGINEERING TECHNOLOGIST PROGRAMS

The University of Adelaide

No engineering technologist programs

Australian Defence Force Academy

See The University of NSW at the Australian Defence Force Academy entry below.

Australian Maritime College

The following program was accredited for implementation at the Australian Maritime College Launceston Tasmania

Bachelor of Technology in:

Marine

1993 – 1996

Central Queensland University, Rockhampton campus (next general review 2016)

The following programs are accredited for implementation at the Rockhampton campus, including feeder programs involving the first 2 years delivery at the Mackay and Gladstone campuses. Both on-campus and external delivery modes are accredited for these programs.

Bachelor of Engineering Technology:

Civil	1997
Electrical	1997

Previously also as separate specialist titles:

<i>Electrical Power and Control Engineering</i>	<i>1997-2006</i>
<i>Computer Systems Engineering</i>	<i>2002-2006</i>
<i>Electronics and Communication Engineering</i>	<i>1997-2006</i>
<i>Industrial Instrumentation Engineering</i>	<i>1999-2006</i>

Mechanical	1997
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and combined degrees with Bachelor of Business (only to 2011) and Bachelor of Education or Bachelor of Learning Management (only to 2006).

Charles Darwin University

No engineering technologist programs

Chisholm Institute of TAFE

The following programs are accredited for implementation at the Chisholm Institute Dandenong campus

Bachelor of Engineering Technology:

Mechanical and Manufacturing	2011(P)
Mechatronics	2011(P)

Curtin University of Technology (next general review 2015)

The following program is accredited for implementation at the Curtin University of Technology, Perth Campus

Bachelor of Technology:

Computer Systems and Networking	2001
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Curtin University of Technology – Western Australian School of Mines

No engineering technologist programs

Curtin University of Technology Sarawak Campus, Malaysia Pathway (next review 2016)

The following program is accredited for implementation at the Curtin University of Technology, Sarawak Campus

Bachelor of Technology:

Computer Systems and Networking	2002
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Although the above program is accredited and recognised by Engineers Australia, ongoing accreditation will need to be confirmed by The Board of Engineers, Malaysia for full recognition under the Sydney Accord.

Deakin University

The following programs were accredited for implementation at the Deakin University Geelong Campus

Bachelor of Technology:

Computer Systems Engineering (formerly <i>Computronics</i>)	2003 – 2006 1999 – 2003
Electronics	1999 – 2006
Environmental	1994 – 2006
Manufacturing	1994 – 2006
Mechanical	1999 – 2006
Mechatronics	1994 – 2006
Robotics	1999 – 2006
Engineering and Management	1996 – 2002

Deakin University - Singapore Pathway via IMC Technologies

The following programs were accredited for implementation via Deakin University Singapore Pathway.

These programs were delivered in enhanced distance study mode with IMC providing local support. The programs were offered only on an articulation basis.

Computronics	1997 – 2004
Electronics	1997 – 2004
Environmental Engineering	1997 – 2004
Manufacturing Engineering	1997 – 2004
Mechanical Engineering	2002 – 2004
Mechatronics	1997 – 2004
Robotics	2002 – 2004

Deakin University - Malaysia Pathway via Kolej Damansara Utame, (KDU) **Kuala Lumpur**

The following programs are accredited for implementation via Deakin University Kuala Lumpur Pathway.

These programs were delivered in enhanced distance study mode with KDU providing local support. The programs were offered only on an articulation basis from a KDU base qualification.

Bachelor of Technology in

Computer Systems Engineering (formerly <i>Computronics</i>)	2004 – 2004
Electronics	2002 – 2004
Mechatronics	2004 – 2004
Robotics	2002 – 2004

Deakin University - Malaysia Pathway via Kolej Damansara Utame, (KDU) **Penang**

The following programs are accredited for implementation via Deakin University Penang Pathway

These programs were delivered in enhanced distance study mode with KDU providing local support. The programs were offered only on an articulation basis from a KDU base qualification.

Bachelor of Technology in

Computer Systems Engineering	2004 – 2004
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(formerly Computronics)

Electronics	2002 – 2004
Mechatronics	2004 – 2004
Robotics	2002 – 2004

Edith Cowan University Joondalup campus (next general review 2012)

The following program is accredited for implementation at the Joondalup campus of Edith Cowan University:

Bachelor of Technology in:

Motorsports	2008
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The following program was accredited for implementation at the Joondalup Campus of Edith Cowan University:

Bachelor of Technology in:

Electronic Systems	1995 – 1998
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Flinders University (next general review 2016)

The following program is accredited for implementation at Flinders University Bedford Park Campus:

Bachelor of Engineering Science	2009 (P)
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Griffith University

No engineering technologist programs

James Cook University

No engineering technologist programs

La Trobe University (Bendigo campus)

No engineering technologist programs

La Trobe University (Bundoora campus) (next general review 2014)

The following program is accredited for implementation at La Trobe University Bundoora campus:

Bachelor of Electronic Technology	1990
Bachelor of Computer Technology	1994- 2007

Macquarie University

The following programs were accredited for implementation at the Macquarie University Sydney Campus

Bachelor of Technology:

Information and Communication Systems	1994 – 2005
Optoelectronics	1994 – 2005

Monash University (Clayton campus) (next review 2013)

The following programs are/were accredited for implementation at the Monash University Clayton Campus

Bachelor of Technology in:

Advanced Manufacturing	1995 – 1999
Aerospace in combination with Bachelor of Engineering in Mechanical Engineering	2003 - 2008
Computer Studies	1996 - 2008
Infrastructure – Design, Construction and Management	2003

Murdoch University

The following programs are/were accredited for implementation at Murdoch University South Street Campus:

Bachelor of Technology in:

Engineering Technology	1999 - 2011
Network and Software Systems	2002 – 2003

Queensland University of Technology (next general review 2012)

The following programs are/were accredited for implementation at Queensland University of Technology Gardens Point Campus, Brisbane

Bachelor of Technology in:

Civil	1993 – 2001
Mechanical	1993 – 2003

Bachelor of Technology: implemented as a dual award with the Advanced Diploma (Hons) program

Civil	2002 – 2005
Mechanical	2003 – 2005

RMIT University

No engineering technologist programs

Swinburne University of Technology

No engineering technologist programs

Australian National University

No engineering technologist programs

University of Ballarat

The following programs are/were accredited for implementation at the University of Ballarat Mt Helen campus Ballarat

Bachelor of Engineering Science in:

Civil	2002 (P)
Mining	2002 (P)
Mechanical	2002 (P)

Bachelor of Technology in:

Biotechnology	1994 – 1998
Civil	1992 – 1999
Electrical	1992 – 1998
Forest Industry	1994 – 1998
Mechanical	1992 – 1998
Physics	1992 – 1998
Information Technology	1992 – 1998
Mineral Industry	1992 – 2002

University of Canberra

No engineering technologist programs

University of New England (next general review 2014)

The following programs are accredited for implementation at University of New England.

Bachelor of Engineering Technology in:

Environmental	2009 (P)
Civil	2011 (P)

Accreditation includes both on-campus and external modes of study.

The University of Melbourne

No engineering technologist programs

The University of Newcastle

No engineering technologist programs

The University of New South Wales

No engineering technologist programs

The University of New South Wales at the Australian Defence Force Academy

(next general review 2016)

(Formerly Royal Military College Duntroon; Faculty of Military Studies of the University of New South Wales)

The following programs are accredited for implementation at UNSW@ADFA

Bachelor of Technology in:

Aeronautical Engineering	1994
Aeronautical Engineering (CDF* program)	2006
Aviation	2001

*CDF refers to Chief of Defence – special research pathway for high achieving incoming students

The University of Queensland

No engineering technologist programs

University of South Australia (next general review 2015)

The following programs were accredited for implementation at the University of South Australia Mawson Lakes (Adelaide) Campus:

Bachelor of Technology:

Mechanical and Manufacturing*	2001
Robotics and Intelligent Manufacturing	2001 – 2004

Bachelor of Technology:

Mechanical and Manufacturing	1995 – 2000
Robotics and Intelligent Manufacturing	1997 – 2000

- The Mechanical and Manufacturing program is due for interim review in 2011.

University of Southern Queensland (next general review 2014)

The following programs are accredited for implementation at the University of Southern Queensland Toowoomba Campus

Bachelor of Engineering Technology:

Agricultural Engineering	2009 (P)
Civil Engineering	1996
Computer Systems Engineering	2001
Electrical and Electronic Engineering	1996
Environmental Engineering	2001
Infrastructure Management Engineering	2001
<i>Previously titled Building and Construction Management</i>	
Mechanical Engineering	1996
Power Engineering	2009 (P)

Accreditation includes both on-campus and external modes of study

The University of Sydney

No engineering technologist programs

University of Tasmania, Hobart Campus (next review 2013)

The following programs are accredited for implementation at the Hobart campus of the University of Tasmania

Bachelor of Engineering Technology in:

Civil <i>(formerly Civil Systems)</i>	1996
Electrical <i>(formerly Electrical Systems and previously Electrical Power)</i>	2001
Mechanical <i>(formerly Mechanical Systems)</i>	1996
Electronics and Computers	2001 - 2004
Electronics and Computing	1996 - 1998
Environmental	1996 - 1999
Manufacturing	1996 – 1998

University of Tasmania – Kuwait Pathway via the Australian College of Kuwait (ACK) (next review 2013)

The following programs are accredited for implementation via the University of Tasmania Kuwait Pathway.

Bachelor of Engineering Technology in:

Civil	2009 (P)
Mechanical	2007

University of Technology, Sydney

The following programs were accredited for implementation at the University of Technology, Sydney Campus Sydney

Bachelor of Engineering Science:

Civil Engineering	2003 - 2008
Civil and Environmental Engineering	2003 - 2008
Construction Engineering	2003 - 2008
Electrical Engineering	2003 - 2008
General Engineering	2003 - 2008
ICT Engineering	2007 – 2008
<i>(formerly;</i>	
<i>Software Engineering</i>	<i>2003 - 2007</i>
<i>Telecommunications Engineering</i>	<i>2003 - 2007</i>
<i>Computer Systems Engineering)</i>	<i>2003 – 2007</i>
Innovation Engineering	2003 - 2008
Mechanical Engineering	2003 - 2008
Mechanical and Mechatronic Engineering	2003 - 2008
And dual degrees with Bachelor of Laws	
Bachelor of Engineering Science:	
Engineering Innovation	2003 - 2008

Bachelor of Technology:

Manufacturing	1994 - 1999
Aerospace Operations	1997 - 1998
Heating Ventilation Air Conditioning	1997 - 1998

The University of Western Australia

No engineering technologist programs

University of Western Sydney

The following programs are/were accredited for implementation at the University of Western Sydney Campus Penrith

Bachelor of Technology in:

Civil	1995 – 2004
Computer	1998 – 2004
Electrical	1995 – 2004
Mechatronic	1995 – 2004
Telecommunications	2000 – 2004
Water Technology	1998 – 2004
Building	1995 – 2002
Mechanical Automation	1995 – 1997

University of Wollongong

The following programs were accredited for implementation at the University of Wollongong Campus Wollongong

Bachelor of Technology:

Civil	1992 – 1997
Mechanical	1992 – 1997
Materials	1992 – 1997

Victoria University (next general review 2013)

The following programs are accredited for implementation at Victoria University - Footscray Park Campus.

Bachelor of Engineering Science in:

Electrical and Electronic Engineering	2008(P)
Photonics*	2003

* dual degrees were offered in the past for Photonics, but not in the current accreditation period.