

Associate Degree in Engineering (Defence Systems)

Open Day will be held on Sunday 15 August 2010, City West campus. Visit unisa.edu.au/openday

Information Sessions will be held at the **Careers Festival**, Sunday 29 August 2010, Mawson Lakes campus.

To register, visit unisa.edu.au/infosessions

Drop-In Times will be available from 6-10 December 2010, from 9.00am – 7.00pm at Campus Central, Mawson Lakes campus.

An additional **Information Session** will be held on Wednesday 15 December, 2010, at 6.30pm, Mawson Lakes campus. To register visit unisa.edu.au/infosessions

SATAC code	N/A
UniSA program code	LTDS
CRICOS code	
(international students only)	N/A
TER (February 2010 cut-off)	N/A
Program length	2 years
Prerequisites	None
Assumed knowledge	None
Home campus	Mawson Lakes
Accepts Special Entry (STAT)	N/A
External study available	N/A
Part-time study available	Yes
TAFE credit available	N/A
Honours study available	N/A
Program fees	Commonwealth supported
Program fees (international students only)	N/A
Scholarships available	unisa.edu.au/scholarship

Program overview

The Associate Degree in Engineering (Defence Systems) focuses on the practical application and management of defence technology. It has been introduced to meet the increasing demand for skilled personnel in the Australian defence industry and also caters for those already employed in the wider workforce.

The program is available to students who can attend on-campus lessons, or if preferred, there is an option to undertake online learning. The program involves site visits to defence organisations and/or industrial sites, and academic courses are taught at UniSA's Defence and Systems Institute located at Mawson Lakes Campus.

This program is a solution for companies wanting to 'Defence Enable' staff and for experienced trades people to find employment in the defence industry. The program has been developed to meet the demand for skilled defence personnel, with course delivery designed to suit students who are currently employed.

What will I study?

This Associate Degree in Engineering (Defence Systems) delivers 16 courses over two years of study. These courses are presented one after the other commencing in early February each year. Students study eight courses in year one and eight courses in year two.

Each course is presented over a five-week period. In each week, one day (Monday or Friday) attendance is required at lectures, tutorials and practicals. An on-line course is presented at the same time as the face-to-face course but without the attendance requirement.

Defence Culture and Systems Mathematics must be successfully completed before undertaking other courses. The remaining courses can be taken in any order.

Students are required to undertake assessed project assignments, where possible, oriented to the workplace. This reflects the nature of the course and contributes to insights and improvements in the student's workplace. Face-to-face students spend a majority of their time in the Distributed Systems Laboratory of the Defence and Systems Institute. This environment helps students adopt the thinking processes required in the engineering of complex military systems.

The use of team-building communications tools such as SharePoint and Centra is also common in both learning environments.

Site visits to defence installations and industrial sites form an important component of the program.

What does it take?

Selection for entry into the program is done on a case-by-case basis. Applicants must have a minimum of five years' experience working in their trade. UniSA requires evidence of past study, transcripts of results and evidence of work experience.

Work-related manufacturer training will also be considered and should be documented.

The Associate Degree in Engineering (Defence Systems) is available only to domestic students and is designed for:

- » experienced trades people currently employed in electrical, metal, electronics and IT trades with minimum qualifications of VET Cert 3 or equivalent.
- » those who have undertaken job-relevant equipment training such as Computer Numerical Control (CNC) programming, operation & maintenance, 3D Computer Aided Drawing (CAD), robotics installation, programming, operation and maintenance, MCSE, production planning or front line management.
- » individuals with more than five years' experience in a trade and with some small team leadership experience.
- » persons who have not undertaken formal study in some years but are ambitious and enthusiastic and looking for their next challenge.

Who will employ me?

Graduates from the program are expected to be employed as Senior Technical Officers in:

- » Defence industry companies
- » The Defence Materiel Organisation
- » The Defence Science and Technology Organisation
- » Other Federal and State Government Departments with a strong technical bias and who may deal with the defence industry

Types of jobs will include:

- » Equipment installation planners and managers
- » Logistics practitioners, planners and managers

- » Management of commissioning and trials of systems
- » Training and mentoring of technicians and junior engineers
- » Development of maintenance and procedure manuals for complex tasks and equipments
- » Management of repair and prototyping workshops;
- » Management of computer-aided design suites.

Fees and employer sponsorship

Domestic students are eligible for the Higher Education Contribution Scheme (HECS-HELP). For further information please visit unisa.edu.au/future/fees

An employer may be eligible to participate in the Defence Materiel Organisation Skilling Australia's Defence Industry (SADI) program. For information about the SADI program visit defence.gov.au/dmo/id/sadi

Program requirements

FIRST YEAR

Defence Culture
Communication Skills for Industry
Systems Mathematics
Introduction to System Design
Systems Project Management
Systems Requirements Management
Elements of Software Design
Integrated Logistics Support

SECOND YEAR

Elements of Electronic Design
Systems Modelling and Simulation
Fundamentals of Military Platform Design
Tendering and Contracting for Defence
Engineering in the Defence Industrial Environment
Systems Integration
Elements of Mechanical Design
Test and Evaluation of Complex Systems



Peter McLeod

Senior Infrastructure Specialist, EDS (Australia) Pty Ltd

'Already the Defence and Systems Institute (DASI) at UniSA is declaring the Associate Degree in Engineering (Defence Systems) to be a success. With the initial intake of participants in the throes of successfully completing the two prerequisite courses (Defence Culture and System Mathematics) the program is gaining momentum as being integral in the career paths of senior technical officers.

I do not currently work in the defence industry; however, I believe this is an exciting place to be. My company has sent me on this program as an investment in both their and my future. EDS has a growing presence in defence in Australia and in particular in South Australia where it is building a practice of skilled defence personnel. The course gives me the opportunity to learn more about the defence industry and how we can build South Australia to be a centre of expertise in defence.

I am meeting people and already establishing useful contacts for the future.'