

# Master of Sciences (Defence Signal Information Processing)

These Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

## 1 Duration of program

Except with the permission of the Faculty, the Master of Sciences (Defence Signal Information Processing) shall be completed in a minimum of three semesters or a maximum of twelve semesters.

## 2 Admission

2.1 Except as provided for in 2.2 below, a candidate for admission to the program of study for the Master of Sciences (Defence Signal Information Processing) shall have:

a qualified for an Honours degree in Mathematics, Physics or Electrical and Electronic Engineering from the University of Adelaide; or a Bachelor degree from the University of Adelaide that includes a major in either Mathematics or Physics, or for a degree of another institution accepted for the purpose by the Faculty as equivalent

*and*

b had at least 18 months experience in the Defence industry

*or*

c qualified for a Graduate Certificate or Graduate Diploma in Sciences (Defence Signal Information Processing).

2.2 The Faculty may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Master of Sciences (Defence Signal Information Processing), a person who does not qualify for admission to the program under rule 2.1 above, but who has given evidence satisfactory to the Faculty of fitness to undertake work for the degree.

2.3 Articulation with other awards

2.3.1 A candidate who has been enrolled for the Graduate Certificate or Graduate Diploma in Signal Information Processing at the University of Adelaide and who has not been awarded the Graduate Certificate or Graduate Diploma shall, on written application, be permitted to transfer all equivalent courses towards the Masters degree.

2.4 Status, exemption and credit transfer

2.4.1 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

2.4.2 Candidates may present courses offered by other universities from a register of approved courses maintained by the Board of Studies but the total value of these external courses must not exceed 12 units (including the core courses).

## 3 Assessment and examination

Academic progress

If in the opinion of the Board of Studies a candidate for the degree is not making satisfactory progress, the Board may terminate the candidature.

## 4 Qualification requirements

4.1 To qualify for the Master of Sciences (Defence Signal Information Processing), a candidate shall satisfactorily complete courses to the value of 36 units including:

a core courses to the value of 6 units from Group A

b courses to the value of 12 units taken from Group B

c courses to the value of 6 units taken from either Group B or C

d supervised project work to the value of 12 units.

4.2 Project work

Subject to such conditions as it may determine, the Faculty may permit project work to be undertaken outside the University provided that it can be satisfied:

a that this will result in mutual academic benefit to the candidate and the supervising school or organisation

b that there will be adequate contact and interaction between the candidate and the supervising school or organisation.

4.3 Academic program

4.3.1	Group A: Compulsory courses	
	These courses offered by the University of South Australia:	
	Research Methods in a Multidisciplinary Environment .....	3
	Systems Engineering for Complex Problem Solving .....	3
	Group B	
	DEFSCI 7011 Adaptive Signal Processing .....	3
	ELEC ENG 7085 Multisensor Data Fusion .....	3
	ELEC ENG 7002 Kalman Filtering and Tracking .....	3
	ELEC ENG 7071 Detection, Estimation and Classification .....	3
	ELEC ENG 7060 Image Sensors & Processing .....	3
	ELEC ENG 7059 Radar Principles & Systems: An Introduction .....	3
	Group C	
	ELEC ENG 7086 Mobile Communications.....	3
	ELEC ENG 7073 Signal Synthesis and Analysis.....	3
	ELEC ENG 7023 Satellite Communications.....	3
	COMP SCI 7022 Computer Vision .....	3
	Supervised project work	
	DEFSCI 7016 A/B Master of Sciences (Defence) Research Project .....	12
4.3.2	Students who are required to undertake preliminary work will normally enrol in one of the following courses:	
	SIP 7027 A/B Qualifying Studies in Mathematics Part 1 & 2.....	12
	SIP 7028 Qualifying Studies in Mathematics .....	12
	On satisfactory completion of this work the student will proceed to study as outlined in 4.3.1 above.	
4.3.3	Candidates who are granted exemption from one or more of the courses listed in 4.3.1 Group B and Group C on the basis of previous studies may select in their place other relevant courses offered by the University of Adelaide or other tertiary institutions in South Australia as may be approved by the Faculty.	
4.3.4	The availability of all courses is conditional on the availability of staff and facilities and sufficient enrolments.	
4.4	Unacceptable combinations of courses	
	No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Committee, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.	
4.5	Graduation	
	Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.	
<b>5</b>	<b>Special circumstances</b>	
	When in the opinion of the Board of Studies special circumstances exist, the Board in each case, may vary any of the provisions of the Academic Program Rules for any particular award.	