

# Master of Environmental Monitoring Technologies

Note: This program will not be offered in 2012

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

## 1 Duration of program

To qualify for the Master of Environmental Monitoring Technologies a candidate shall satisfactorily complete a program of study comprising 4 semesters of full-time study or no more than 10 semesters of part-time study.

## 2 Admission

2.1 An applicant for admission to the academic program for the degree of Master of Environmental Monitoring Technologies shall have qualified for a Bachelor degree of the University of Adelaide in science or engineering, or a degree of another institution accepted by the Faculty for the purpose as equivalent.

2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 No candidate will be permitted to count for the degree any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award. Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for any award.

2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for equivalent post-graduate level studies.

2.3.3 No candidate will be awarded more than 24 units of status. Those candidates who have completed (a) the Graduate Certificate in Environmental Monitoring Technologies or the Graduate Diploma in Environmental Monitoring Technologies, who will be awarded 12 units and 24 units of status respectively; (b) or the Graduate Certificate in Science and Technology Commercialisation or the Graduate Diploma in Science and Technology Commercialisation, who will be awarded up to 12 units and 24 units of status respectively.

2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially there from by the Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of Environmental Monitoring Technologies who does not complete the requirements for the Masters degree but satisfies the requirements for the Graduate Certificate in Environmental Monitoring Technologies or Graduate Diploma in Environmental Monitoring Technologies may be admitted to one of those awards, as appropriate, subject to the student discontinuing candidature for the higher award.

2.4.2 A candidate who has been admitted to the Graduate Certificate in Environmental Monitoring Technologies or Graduate Diploma in Environmental Monitoring Technologies and who subsequently satisfies the requirements for the Master of Environmental Monitoring Technologies must surrender the Graduate Certificate or Graduate Diploma degree before being admitted to the Masters degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.

3.2 a a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.

b for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.

3.3 A candidate who has failed a course twice may not re-enrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

To qualify for the degree of Master of Environmental Monitoring Technologies a candidate shall satisfactorily pass courses, listed in 4.1 to, the value of 48 units.

4.1 Academic program

Note: Candidates should note that courses offered in the Master of Environmental Monitoring Technologies are subject, at all times, to availability.

#### 4.1.1 Core Courses

All candidates shall complete the following core courses:

ENVBIOL 7022 Monitoring Technologies for Ecological Systems .....	3
CHEMENG 7049 Engineering Process Technologies .....	3
ENV BIOL 7027 Designing Environmental Monitoring Programs .....	3
STATS 7053 Statistics in Engineering .....	3
<i>or</i>	
PUB HLTH 7074 Introduction to Biostatistics .....	3

#### 4.1.2 Elective Courses

All candidates shall complete 21 units of elective courses as follows:

i passes to the value of 9 units from the following areas of study

##### **Commercialisation**

TECHCOMM 5001 Marketing Technology and Innovation .....	3
TECHCOMM 5002 Managing Product Design and Development .....	3
TECHCOMM 5003 Strategic Analysis for Technology Commercialisation .....	3
TECHCOMM 5005 Financing Commercialisation .....	3
TECHCOMM 5006 Technology Management and Transfer .....	3
TECHCOMM 5007 Legal Issues of the Commercialisation Process .....	3
TECHCOMM 5011 Internationalisation of Technology .....	3
TECHCOMM 5008 Leading and Managing .....	3

ii passes in additional courses to the value of 3 units from the following areas of study

##### **Environment**

C&ENVENG 7029 Environmental Modelling, Management and Design .....	3
ENV BIOL 7017 Issues in Sustainable Environments .....	3
ENV BIOL 7018EX Critical Thinking about Global Warming .....	3
WRM 7024 Freshwater Ecology .....	3
WRM 7025 Modelling for Environmental Management .....	3
WRM 7026 Integrated Catchment Management .....	3
SCIENCE 7020 Communicating Science. ....	3

iii passes in additional courses to the value of 9 units from any of the following areas of study

##### **Physics of Environmental Monitoring\***

C&ENVENG 7043 Introduction to Geostatistics .....	3
ELEC ENG 7059 Radar Principles & Systems - an Introduction .....	3
ELEC ENG 7060 Image Sensors and Processing .....	3
PHYSICS 7007 Fourier Techniques & Applications .....	3
PHYSICS 7104 Electronics for Data Acquisition .....	3
PHYSICS 7532 Atmospheric & Astrophysics Physics .....	3
PHYSICS 7540 Optics & Photonics .....	3
SIP 7005 Multisensor Data Fusion .....	3

\* Students undertaking courses in the Physics of Environmental Monitoring theme need to have passes in APP MATH 2000 and APP MATH 2002 or MATHS 2201 and MATHS 2202 or equivalent knowledge.

##### **Quality Measurement**

CHEM ENG 7036 Air Pollution .....	3
Advanced Topics in Environmental Monitoring Technologies .....	3
PLANT SC 7022EX Invasion Biology: Foundations of Biosecurity .....	3
PLANT SC 7120WT Molecular Diagnostic Methods in Plant Health .....	3
SOIL&WAT 7003WT Topics in Soil and Land Systems .....	3
SOIL&WAT 7005WT Environmental Toxicology and Remediation .....	3

##### **Sensing and Modelling**

	C&ENVENG 7036Water Resources Optimisation and Modelling.....	3
	SOIL&WAT 7008Remote Sensing.....	3
	SOIL&WAT 7007WTGIS for Environmental Management .....	3
	<i>or</i>	
	SOIL&WAT 7025WTGIS for Agricultural Sciences .....	3
4.1.3	Research Project	
	All candidates shall complete 15 units of a Research Project as follows:	
	ENV BIOL 7300 EMT: Research Methods Industry Project .....	3
	ENV BIOL 7302 EMT: Industry Research Project (F/T).....	12
	<i>or</i>	
	ENV BIOL 7301A/B EMT: Industry Research Project (P/T) .....	12
	Additionally candidates may select other electives courses chosen from programs offered by the University, subject to prior approval of the Program Coordinator. Candidates should note that courses offered in the Master of Environmental Monitoring Technologies are subject, at all times, to availability.	
4.2	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 Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.	
4.3	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.	

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: This program involves courses that may be attended by both undergraduate and postgraduate students.