

# Graduate Diploma in Engineering

## 1 General

The Graduate Diploma in Engineering shall be available in the disciplines of:

- Aerospace
- Chemical
- Civil & Environmental
- Civil & Structural
- Electrical
- Electronic
- Mechanical
- Mechatronic
- Mining

## 2 Duration of program

The program of study for the Graduate Diploma in Engineering shall extend over 1 year of full-time study or the equivalent part-time study.

## 3 Admission

3.1 An applicant for admission to the program of study for the Graduate Diploma in Engineering shall have qualified for a degree of the University or for a degree of another institution accepted for the purpose by the Faculty as being equivalent to the degree of Bachelor of Engineering in a discipline related to the proposed field of study.

3.2 The Faculty may, in special cases and subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma in Engineering, a person who does not qualify for admission to the program under Rule 3.1 above, but has given evidence satisfactory to the Faculty, of fitness to undertake work for the degree.

### 3.3 Status, exemption and credit transfer

A candidate may not present for credit towards the degree any course which has been presented as part of the requirements for any other award of this University or other institution, or which in the opinion of the Faculty is substantially similar to such course. However, candidates may, on written application to the Faculty, be granted permission to substitute core courses for an alternative course.

### 3.4 Articulation with other awards

3.4.1 A candidate who has been enrolled in the Master of Engineering from the University of Adelaide and who has not been awarded the Master of Engineering shall, on written application, be permitted to transfer all equivalent courses towards the Graduate Diploma in Engineering award.

## 4 Assessment and examinations

4.1 There shall be four classifications of pass in any course for the Master of Engineering: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.

4.2 A candidate shall not be eligible to attend for examination unless the prescribed coursework has been completed to the satisfaction of the teaching staff concerned.

4.3 A candidate who fails a course and desires to take the course again shall again attend the course and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.

4.4 A candidate who has twice failed any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.

4.5 For the purpose of this Rule, a candidate who is refused permission to sit for examination, or who fails to attend all or part of a final examination (or supplementary examination if granted) without a reason accepted by the Faculty, shall be deemed to have failed that course.

## 5 Qualification requirements

5.1 To qualify for the degree of Graduate Diploma in Engineering a candidate shall satisfactorily complete courses to the value of 24 units including core courses from 5.2.1 to the value of 9 units, discipline-specific foundation courses from 5.2.2 to the value of 12 units and elective courses from that same discipline to the value of 3 units selected from 5.2.3 below:

### 5.2 Academic program

#### 5.2.1 Core courses

ELEC ENG 7057 Engineering Communication & Critical Thinking ..... 3

*plus*

a total of 6 units from either:

TECHCOMM 5021 Applied Project Management 1 ..... 3

STATS 7053 Statistics in Engineering .....	3
APP MTH 7054 System Modelling & Simulation* .....	3
COMP SCI 7077 System Modelling & Simulation* .....	3

\*Only one of the two System Modelling courses can be presented

#### 5.2.2 Discipline-specific Foundation courses

##### **Aerospace**

MECH ENG 7073 Space Vehicle Design .....	3
MECH ENG 7068 Applied Aerodynamics .....	3
MECH ENG 7066 Aeronautical Engineering .....	3
MECH ENG 7067 Aerospace Materials & Structures .....	3

##### **Chemical**

CHEM ENG 7050 Chem Eng Applications A.....	3
CHEM ENG 7051 Chem Eng Applications B.....	3
CHEM ENG 7052 Chem Eng Application C.....	3
CHEM ENG 7053 Chem Eng Applications D.....	3

##### **Civil & Environmental**

C&ENVENG 7079 Water Engineering and Design .....	3
C&ENVENG 7011 Engineering Management and Planning .....	3
C&ENVENG 7029 Environmental Modelling, Management & Design.....	3
C&ENVENG 7077 Engineering Hydrology .....	3

##### **Civil & Structural**

C&ENVENG 7058 Structural Mechanics.....	3
C&ENVENG 7007 Structural Design (Steel) .....	3
C&ENVENG 7005 Structural Design (Concrete).....	3
C&ENVENG 7069 Geotechnical Engineering .....	3

##### **Electrical**

ELEC ENG 7082 Principles of Control Systems.....	3
ELEC ENG 7049 Power Electronic Systems .....	3
ELEC ENG 7069 Electric Energy Systems.....	3
ELEC ENG 7074 Power Systems.....	3

##### **Electronic**

ELEC ENG 7033 Principles of RF Engineering .....	3
ELEC ENG 7048 Principles of Control Systems.....	3
ELEC ENG 7080 Principles of Communication Systems.....	3
ELEC ENG 7079 Principles of Signal Processing.....	3

##### **Mechanical**

MECH ENG 7047 Dynamics & Control II .....	3
MECH ENG 7068 Applied Aerodynamics .....	3
MECH ENG 7070 Heat Transfer & Thermodynamics.....	3
MECH ENG 7074 Structural Design & Solid Mechanics .....	3

##### **Mechatronic**

MECH ENG 7047 Dynamics & Control II .....	3
MECH ENG 7070 Heat Transfer & Thermodynamics.....	3
MECH ENG 7071 Mechatronics II .....	3
MECH ENG 7072 Microcontroller Programming.....	3

##### **Mining**

MINING 7071 Mining Systems.....	3
MINING 7070 Resource Estimation.....	3
MINING 7073 Mine Planning .....	3
MINING 7072 Mining Geomechanics.....	3

#### 5.2.3 Discipline-specific Elective Courses

A course to the value of 3 units must be chosen from the relevant discipline-specific area listed in clause 5.2.3 of the Academic Program Rules for the Master of Engineering.

Candidates must complete a course denoted with an asterisk where those are listed within the discipline.

The availability of all courses is conditional on there being adequate staffing and resources

### 5.3 Unacceptable combination of courses

No candidate will be permitted to present towards an award two courses which, in the opinion of the Faculty, contain a substantial amount of the same academic material; furthermore, no course or portion of a course may be presented twice towards an award. Where courses contain a substantial amount of the same academic material as previously completed courses, on written application to the Faculty, students may be granted permission to substitute core courses for an alternative course as approved by the Faculty.

### 5.4. 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 at a graduation ceremony for the purpose.

## 6 **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.