DIPLOMA IN ENGINEERING

Information for students who commenced the Diploma in 2024

Completing the Diploma in Engineering lets you receive guaranteed entry and up to:

70 units of credit into the Bachelor of Aerospace Systems Engineering (Honours)

80 units of credit into the Bachelor of Chemical Engineering (Honours)

80 units of credit into the Bachelor of Civil Engineering (Honours)

80 units of credit into the Bachelor of Computer Systems Engineering (Honours)

80 units of credit into the Bachelor of Electrical and Electronic Engineering (Honours)

80 units of credit into the Bachelor of Environmental Engineering (Honours)

80 units of credit into the Bachelor of Mechanical Engineering (Honours)

70 units of credit into the Bachelor of Mechatronics Engineering (Honours)

60 units of credit into the Bachelor of Medical Engineering (Honours)

80 units of credit into the Bachelor of Renewable Energy Engineering (Honours)

80 units of credit into the Bachelor of Software Engineering (Honours)

80 units of credit into the Bachelor of Surveying (Honours)

Whether you can receive the full amount of credit will depend on which directed course you complete in the Diploma in Environment and which Bachelor degree program you choose. Please refer to the information below to make sure you choose the right courses to maximise your credit into your chosen Bachelor degree program. Please note that program structures can vary from year to year and that the credit you are eligible for at the completion of the Diploma may vary from what is listed in this document.

Diploma in Engineering Course		Equivalent Bachelor Course	
FNEG1003	Engineering Computations and Procedural Programming	ENGG1003	Introduction to Procedural Programming
FNEG1004	Fundamentals of Engineering Mechanics	CIVL1100	Fundamentals of Engineering Mechanics
FNEG1005	Introduction to Electrical Engineering	ELEC1310	Introduction to Electrical Engineering
FNEG1110	Introduction to Mechanical Engineering Design	MECH1110	Introduction to Mechanical Engineering Design
FNMT1003	Foundational Studies in Mathematics 1	MATH1002*	Foundational Studies in Mathematics
FNMT1004	Foundational Studies in Mathematics 2		
FNPS1003	Engineering Physics	Depending on the Bachelor of Engineering program, students may be able to receive credit for a 10 unit unspecified 1000 level elective	

^{*} Students must successfully complete both FNMT1003 and FNMT1004 in order to receive credit for MATH1002. Depending on the Bachelor of Engineering program, students may also receive credit for a 10 unit unspecified 1000 level elective.



Bachelor of Aerospace Systems Engineering (Honours)

Students who successfully complete the Diploma in Engineering can receive 70 units of credit for

* FNMT1003 and FNMT1004 will count as credit for MATH1002. Both courses must be completed for credit.

Course will count as an elective in the Bachelor of Aerospace Systems Engineering (Honours).

Complete the following four core courses

ENGG1500 Introduction to Professional Engineering
FNMT1003* Foundational Studies in Mathematics 1
FNMT1004* Foundational Studies in Mathematics 2

FNPS1003# Engineering Physics

Complete four of the following directed courses

ELEC1710 Digital and Computer Electronics 1

FNEG1003 Engineering Computations and Procedural Programming
FNEG1004 Fundamentals of Engineering Mechanics
FNEG1005 Introduction to Electrical Engineering
FNEG1110 Introduction to Mechanical Engineering Design

Bachelor of Chemical Engineering (Honours)

Engineering Materials 1

Students who successfully complete the Diploma in Engineering can receive 80 units of credit for

* FNMT1003 and FNMT1004 will count as credit for MATH1002 and a 10 unit 1000 level unspecified elective. Both courses must be completed for credit.

Course will count as an elective in the Bachelor of Chemical Engineering (Honours).

Complete the following four core courses

MECH1750

ENGG1500 Introduction to Professional Engineering
FNMT1003* Foundational Studies in Mathematics 1
FNMT1004* Foundational Studies in Mathematics 2
FNPS1003 Engineering Physics

Complete the following four following directed courses

CHEE1000 Process Engineering Principles

CHEM1010 Introductory Chemistry I

FNEG1003 Engineering Computations and Procedural Programming

Program code: 40128

CRICOS Provider: 00109J

PHYS1210 Advanced Physics I



Bachelor of Civil Engineering (Honours)

Students who successfully complete the Diploma in Engineering can receive 80 units of credit for

* FNMT1003 and FNMT1004 will count as credit for MATH1002 and a 10 unit 1000 level unspecified elective. Both courses must be completed for credit.

Course will count as an elective in the Bachelor of Civil Engineering (Honours).

Complete the following four core courses

ENGG1500 Introduction to Professional Engineering
FNMT1003* Foundational Studies in Mathematics 1
FNMT1004* Foundational Studies in Mathematics 2

FNPS1003# Engineering Physics

Complete four of the following directed courses

CIVL1200 Earth Systems

FNEG1003 Engineering Computations and Procedural Programming

FNEG1004 Fundamentals of Engineering Mechanics

PHYS1205 Fundamentals of Engineering Physics

SURV1200 Introduction to Surveying

Bachelor of Computer Systems Engineering (Honours)

Students who successfully complete the Diploma in Engineering can receive 80 units of credit for

* FNMT1003 and FNMT1004 will count as credit for MATH1002 and a 10 unit 1000 level unspecified elective. Both courses must be completed for credit.

Course will count as an elective in the Bachelor of Computer Systems Engineering (Honours).

Complete the following four core courses

ENGG1500 Introduction to Professional Engineering
FNMT1003* Foundational Studies in Mathematics 1
FNMT1004* Foundational Studies in Mathematics 2

FNPS1003# Engineering Physics

Complete the following four directed courses

ELEC1710 Digital and Computer Electronics 1

FNEG1003 Engineering Computations and Procedural Programming

FNEG1005 Introduction to Electrical Engineering

SENG1110 Object Oriented Programming



Bachelor of Electrical and Electronic Engineering (Honours)

Students who successfully complete the Diploma in Engineering can receive 80 units of credit for

* FNMT1003 and FNMT1004 will count as credit for MATH1002 and a 10 unit 1000 level unspecified elective. Both courses must be completed for credit.

Course will count as elective in the Bachelor of Electrical and Electronic Engineering (Honours).

Complete the following four core courses

ENGG1500 Introduction to Professional Engineering
FNMT1003* Foundational Studies in Mathematics 1
FNMT1004* Foundational Studies in Mathematics 2

FNPS1003# Engineering Physics

Complete the following four directed courses

ELEC1710 Digital and Computer Electronics 1

FNEG1003 Engineering Computations and Procedural Programming

FNEG1005 Introduction to Electrical Engineering

PHYS1210 Advanced Physics I

Bachelor of Environmental Engineering (Honours)

Students who successfully complete the Diploma in Engineering can receive 80 units of credit for

* FNMT1003 and FNMT1004 will count as credit for MATH1002 and a 10 unit 1000 level unspecified elective. Both courses must be completed for credit.

Course will count as an elective in the Bachelor of Environmental Engineering (Honours).

Complete the following four core courses

ENGG1500 Introduction to Professional Engineering
FNMT1003* Foundational Studies in Mathematics 1
FNMT1004* Foundational Studies in Mathematics 2
FNPS1003# Engineering Physics

Complete the following four directed courses

CHEM1010 Introductory Chemistry I

CIVL1200 Earth Systems

FNEG1003 Engineering Computations and Procedural Programming

Program code: 40128

CRICOS Provider: 00109J

SURV1200 Introduction to Surveying



Bachelor of Mechanical Engineering (Honours)

Students who successfully complete the Diploma in Engineering can receive 80 units of credit for

* FNMT1003 and FNMT1004 will count as credit for MATH1002 and a 10 unit 1000 level unspecified elective. Both courses must be completed for credit.

Course will count as an elective in the Bachelor of Mechanical Engineering (Honours).

Complete the following four core courses

ENGG1500 Introduction to Professional Engineering
FNMT1003* Foundational Studies in Mathematics 1
FNMT1004* Foundational Studies in Mathematics 2
FNPS1003# Engineering Physics

Complete four of the following directed courses

FNEG1003 Engineering Computations and Procedural Programming
 FNEG1004 Fundamentals of Engineering Mechanics
 FNEG1005 Introduction to Electrical Engineering
 FNEG1110 Introduction to Mechanical Engineering Design
 MECH1750 Engineering Materials 1

Bachelor of Mechatronics Engineering (Honours)

Students who successfully complete the Diploma in Engineering can receive 70 units of credit for

* FNMT1003 and FNMT1004 will count as credit for MATH1002. Both courses must be completed for credit.

Course will count as an elective in the Bachelor of Mechatronics Engineering (Honours).

Complete the following four core courses

ENGG1500 Introduction to Professional Engineering
FNMT1003* Foundational Studies in Mathematics 1
FNMT1004* Foundational Studies in Mathematics 2
FNPS1003# Engineering Physics

Complete four of the following directed courses

ELEC1710	Digital and Computer Electronics 1
FNEG1003	Engineering Computations and Procedural Programming
FNEG1004	Fundamentals of Engineering Mechanics
FNEG1005	Introduction to Electrical Engineering
FNEG1110	Introduction to Mechanical Engineering Design
MECH1750	Engineering Materials 1



Bachelor of Medical Engineering (Honours) - Medical Devices Major

Students who successfully complete the Diploma in Engineering can receive 60 units of credit for

* FNMT1003 and FNMT1004 will count as credit for MATH1002. Both courses must be completed for credit.

Course will not count as credit in the Bachelor of Medical Engineering (Honours).

Complete the following four core courses

ENGG1500 Introduction to Professional Engineering

FNMT1003* Foundational Studies in Mathematics 1

FNMT1004* Foundational Studies in Mathematics 2

FNPS1003# Engineering Physics

Complete four of the following directed courses

ELEC1710 Digital and Computer Electronics 1

FNEG1003 Engineering Computations and Procedural Programming

FNEG1005 Introduction to Electrical Engineering

HUBS1420 Professional and Communication Skills in Biomedicine

PHYS1210 Advanced Physics I

Bachelor of Medical Engineering (Honours) - Medical Biomechanics Major

Students who successfully complete the Diploma in Engineering can receive 60 units of credit for

* FNMT1003 and FNMT1004 will count as credit for MATH1002. Both courses must be completed for credit.

Course will not count as credit in the Bachelor of Medical Engineering (Honours).

^ Only complete a maximum of one of these courses.

Complete the following four core courses

ENGG1500 Introduction to Professional Engineering

FNMT1003* Foundational Studies in Mathematics 1

FNMT1004* Foundational Studies in Mathematics 2

FNPS1003# Engineering Physics

Complete four of the following directed courses

FNEG1003 Engineering Computations and Procedural Programming

FNEG1004[^] Fundamentals of Engineering Mechanics

FNEG1005[^] Introduction to Electrical Engineering

FNEG1110 Introduction to Mechanical Engineering Design

HUBS1420 Professional and Communication Skills in Biomedicine

MECH1750 Engineering Materials 1

PHYS1210[^] Advanced Physics I



Bachelor of Renewable Energy Engineering (Honours)

Students who successfully complete the Diploma in Engineering can receive 80 units of credit for

* FNMT1003 and FNMT1004 will count as credit for MATH1002 and a 10 unit 1000 level unspecified elective. Both courses must be completed for credit.

Course will count as an elective in the Bachelor of Renewable Energy Engineering (Honours).

Complete the following four core courses

ENGG1500 Introduction to Professional Engineering
FNMT1003* Foundational Studies in Mathematics 1
FNMT1004* Foundational Studies in Mathematics 2
FNPS1003# Engineering Physics

Complete four of the following directed courses

CHEE1000 Process Engineering Principles

CHEM1010 Introductory Chemistry I

FNEG1003 Engineering Computations and Procedural Programming

FNEG1005 Introduction to Electrical Engineering

PHYS1210 Advanced Physics I

Bachelor of Software Engineering (Honours)

Students who successfully complete the Diploma in Engineering can receive 80 units of credit for

* FNMT1003 and FNMT1004 will count as credit for MATH1002 and a 10 unit 1000 level unspecified elective. Both courses must be completed for credit.

Course will count as an elective in the Bachelor of Software Engineering (Honours).

Complete the following four core courses

ENGG1500 Introduction to Professional Engineering
FNMT1003* Foundational Studies in Mathematics 1
FNMT1004* Foundational Studies in Mathematics 2

FNPS1003# Engineering Physics

Complete the following four directed courses

COMP1010 Computing Fundamentals

SENG1050 Web Technologies

SENG1110 Object Oriented Programming

SENG1120 Data Structures



Bachelor of Surveying (Honours)

Students who successfully complete the Diploma in Engineering can receive 80 units of credit for

* FNMT1003 and FNMT1004 will count as credit for MATH1002 and a 10 unit 1000 level unspecified elective. Both courses must be completed for credit.

Course will count as an elective in the Bachelor of Surveying (Honours).

Complete the following four core courses

ENGG1500 Introduction to Professional Engineering
FNMT1003* Foundational Studies in Mathematics 1
FNMT1004* Foundational Studies in Mathematics 2

FNPS1003# Engineering Physics

Complete four of the following directed courses

FNEG1003 Engineering Computations and Procedural Programming

FNEG1004 Fundamentals of Engineering Mechanics
PHYS1205 Fundamentals of Engineering Physics

SENG1120 Data Structures

SURV1200 Introduction to Surveying

Questions?

Please contact the Pathways and Academic Support Office

Newcastle Campus (Callaghan) Central Coast Campus (Ourimbah)

Program code: 40128

Room GPG01, General Purpose Building Room HO168, Humanities Building

(02) 4921 5558 (02) 4348 4076

enabling@newcastle.edu.au enabling@newcastle.edu.au

