# 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 Engincering 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 |  |

[^0]
## 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
MECH1750 Engineering Materials 1

## Bachelor of Chemical 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 Chemical 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 following directed courses
CHEE1000 Process Engineering Principles
CHEM1010 Introductory Chemistry I
FNEG1003 Engineering Computations and Procedural Programming
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 $\mathbf{8 0}$ 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
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).
${ }^{\wedge}$ 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 $\mathbf{8 0}$ 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)

Room GPG01, General Purpose Building (02) 49215558
enabling@newcastle.edu.au

## Central Coast Campus (Ourimbah)

Room HO168, Humanities Building
(02) 43484076
enabling@newcastle.edu.au


[^0]:    * 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.

