



**BACHELOR OF INFORMATION TECHNOLOGY  
(DATA ENGINEERING)**

**DIPLOMA OF INFORMATION TECHNOLOGY**

**UNDERGRADUATE CERTIFICATE IN DATA ENGINEERING**

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NSW

# BACHELOR OF INFORMATION TECHNOLOGY (DATA ENGINEERING)

Course Code: HE20525

This course will give graduates the skills required for building data systems, architecture and platforms to support big data solutions.

Big data is a fast evolving field in business and commerce, enjoying a growing demand for professionals with the expertise to build IT solutions to manage it.

In this course you will develop a thorough understanding of IT systems, concepts and methodologies, as well as a comprehensive knowledge of networking, technology and systems, data security and infrastructure engineering.

You will also develop analytical and critical evaluation skills that you will be able to apply to practical projects and simulated real workplace contexts.

On successful completion of this course you will be able to work in a range of roles related to the management and security of big data.

## COURSE REQUIREMENTS

The Bachelor of Information Technology (Data Engineering) requires you to complete 24 subjects and a total of 240 credit points.

A one year Diploma of Information Technology is also available, requiring the completion of eight subjects and 80 credit points.

## FAST TRACK YOUR STUDIES

If you've completed studies in a related field, or have extensive, relevant industry experience, you may be eligible for exemption from some subjects. All applications for exemption must be made to the course coordinator and include supporting documents. You should attend classes until you are formally advised that your application for exemption has been granted.

## APPLYING AND ENROLLING

For information about applying and enrolling go to: [tafensw.edu.au/degrees/bachelor-of-information-technology-data-engineering](http://tafensw.edu.au/degrees/bachelor-of-information-technology-data-engineering)

## PAYMENT OF TUITION FEES

Students who enrol in this course may be eligible to pay their tuition fees using FEE-HELP. FEE-HELP is an Australian Government student loan scheme. More information about FEE-HELP including eligibility criteria is available at: [studyassist.gov.au/help-loans/fee-help](http://studyassist.gov.au/help-loans/fee-help)

# DIPLOMA OF INFORMATION TECHNOLOGY

Course Code: HE20526

The Diploma of Information Technology is also available to study, requiring you to complete eight subjects and 80 credit points.

The diploma course is comprised of all the first year subjects studied in the degree, and can be completed in one year of full time study. Graduates of the diploma course will be able to apply for entry level IT positions. Alternatively they can continue their studies with direct entry into second year of the bachelor course.

## STUDY MODE AND DURATION

Three years full time or part time equivalent

## COURSE DELIVERY LOCATION

### Bachelor:

- TAFE NSW Meadowbank

### Diploma:

- TAFE NSW St Leonards
- TAFE NSW Meadowbank

## ENTRY REQUIREMENTS

All applicants will be invited to a pre-admission interview prior to being offered a place in this course. All applicants will also have to submit a 500 word essay outlining their motivation to study and work in the field.

Domestic applicants must have completed:

- the NSW HSC or equivalent with HSC level Maths, or
- a Tertiary Preparation Certificate, or
- a Certificate IV or higher qualification

If you do not have HSC mathematics you may be required to undertake a bridging program or preparatory mathematics course. If you do not meet the entry requirements, you can apply under special admission provisions (such as mature age or disadvantage). You will be required to submit documentation to support your application for special admission.

**International applicants** applying for admission, must have an overall IELTS score of 6.5 (with no band less than 6.0). International applicants applying for admission into the diploma must have an overall IELTS score of 5.5 (with no band less than 5.0). The IELTS test must have been completed in the last two years.

## TUITION FEES

### Domestic students:

\$1,310 per 10 credit point subject  
\$10,480 indicative diploma course fee  
\$31,440 indicative full bachelor course fee

### International students - Bachelor:

\$2,540 per 10 credit point subject  
\$60,960 indicative full bachelor course fee

### International students - Diploma:

\$2,950 per 10 credit point subject  
\$23,600 indicative full diploma course fee  
Diploma students receive an additional 5 hours per week of tuition support



## COURSE STRUCTURE

This structure is the typical study pattern for a full time student. All subjects are worth 10 credit points (CP). 240 credit points are required to complete this course. The Diploma of Information Technology requires the completion of all Year 1 subjects.

### YEAR 1 - LEVEL 100: FOUNDATION SKILLS

<b>SEMESTER 1: Complete all subjects</b>	
<b>ITICT108A</b>	Introduction to Cyber Security
<b>ITICT102A</b>	Introduction to Programming
<b>ITICT103A</b>	Internetworking 1
<b>ITPRD102A</b>	Communication for the IT Professional
<b>SEMESTER 2: Complete all subjects</b>	
<b>ITICT104A</b>	Internetworking 2
<b>ITICT107A</b>	Introduction to Databases
<b>ITICT109A</b>	Virtualisation
<b>ITPRD103A</b>	Professional Issues in IT

### YEAR 2 - LEVEL 200: DEVELOPMENT

<b>SEMESTER 1: Complete all subjects</b>	
<b>ITNET203A</b>	Network Security
<b>ITICT206A</b>	Machine Learning
<b>ITDAT203A</b>	Introduction to Data Analysis
<b>ITPRD206A</b>	Critical Thinking for the IT Professional
<b>SEMESTER 2: Complete all subjects</b>	
<b>ITDAT202A</b>	Data Infrastructure Engineering
<b>ITDAT201A</b>	Advanced Data Analysis
<b>ITPRD205A</b>	Project Management
	<b>Plus 1 Level 200 elective</b>

### YEAR 3 - LEVEL 300: SYNTHESIS

<b>SEMESTER 1: Complete all subjects</b>	
<b>ITDAT301A</b>	Big Data and Advanced Database Concepts
<b>ITDAT302A</b>	Data Mining and Visualisation
<b>ITNET311A</b>	Major Group Project
	<b>Plus 1 Level 300 elective</b>
<b>SEMESTER 2: Complete all subjects</b>	
<b>ITDAT303A</b>	Data and Network Security
<b>ITDAT304A</b>	Emerging Trends in Data Technology
<b>ITNET312A</b>	Major Individual project
	<b>Plus 1 Level 300 elective</b>

### ELECTIVE BANK

<b>LEVEL 200</b>	
<b>ITICT202A</b>	Wireless Networks
<b>ITNET202A</b>	Enterprise Security
<b>ITPRD203A</b>	Knowledge Management
<b>ITICT207A</b>	Fundamentals of Computer Science
<b>LEVEL 300</b>	
<b>ITICT303A</b>	Distributed Computing
<b>ITNET307A</b>	National Data Infrastructure Security
<b>ITNET309A</b>	Computer and Network Forensics
<b>ITNET310A</b>	Software Defined and Programmable Networks
<b>ITNET313A</b>	Cloud Computing
<b>ITICT302A</b>	Secure Programming

# UNDERGRADUATE CERTIFICATE IN DATA ENGINEERING

Course Code: HE20545

This short course is designed for people working in IT roles who want to develop the skills to cultivate business intelligence from large data sets, or to share information gathered from data to develop new business strategies. The Undergraduate Certificate in Data Engineering requires the completion of four subjects covering introductory programming, introductory data analysis, introduction to databases and machine learning. On completion of the short course, if you do decide to continue your studies in the Bachelor of Information Technology (Data Engineering), you will get credit for the four subjects completed.

For more information go to: [tafensw.edu.au/degrees/higher-education-short-courses](https://tafensw.edu.au/degrees/higher-education-short-courses)

## TERMS AND CONDITIONS

This document is intended as a general guide only. Information in this document is current as of September 2021. Prospective students should contact TAFE NSW for more information, and to confirm admission requirements and availability of courses. Note that tuition fees are reviewed annually and are subject to change. For current fee information visit: [tafensw.edu.au/degrees/applying-and-fees/fees-and-payment](https://tafensw.edu.au/degrees/applying-and-fees/fees-and-payment). Fees payable by the student are the tuition fees valid for that semester, and not the tuition fees that were in place the first time the student enrolled. Additional fees may be payable for equipment and resources.

