## STUDY MODE AND DURATION

Three years full time or part time equivalent

### COURSE DELIVERY LOCATIONS

**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 into the Bachelor 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:**

$1,280 per 10 credit point subject

$10,249 indicative Diploma course fee

$30,720 indicative full Bachelor course fee

**International students - Bachelor:**

$2,480 per 10 credit point subject

$59,520 indicative full Bachelor course fee

**International students - Diploma:**

$2,875 per 10 credit point subject

$23,000 indicative full Diploma course fee.

Diploma students receive an additional 5 hours per week of tuition support

# BACHELOR OF INFORMATION TECHNOLOGY
## DATA ENGINEERING

COURSE CODE: HE20525

# DIPLOMA OF INFORMATION TECHNOLOGY

COURSE CODE: HE20526

**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.

A Diploma of Information Technology is also available. The Diploma, which comprises all eight first year subjects, can be completed in one year full-time. Graduates of the Diploma 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 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 8 subjects and 80 credit points.

# HOW IS THE COURSE STRUCTURED?

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

| SEMESTER 1: Complete all subjects | |
|---|---|
| ITICT102A | Introduction to Programming (10 CP) |
| ITICT103A | Internetworking 1 (10 CP) |
| ITICT106A | Introduction to Computing (10 CP) |
| ITPRD101A | Critical Thinking for the IT Professional (10 CP) |

| SEMESTER 2: Complete all subjects | |
|---|---|
| ITDAT101A | Introduction to Data Analysis (10 CP) |
| ITICT104A | Internetworking 2 (10 CP) |
| ITICT107A | Introduction to Databases (10 CP) |
| ITPRD102A | Communication for the IT Professional (10 CP) |

## YEAR 2 - LEVEL 200: DEVELOPMENT

| SEMESTER 1: Complete all subjects | |
|---|---|
| ITDAT201A | Advanced Data Analysis (10 CP) |
| ITICT207A | Fundamentals of Computer Science (10 CP) |
| ITNET203A | Network Security (10 CP) |
| ITPRD205A | Project Management (10 CP) |

| SEMESTER 2: Complete all subjects | |
|---|---|
| ITDAT202A | Data Infrastructure Engineering (10 CP) |
| ITICT205A | Virtualisation (10 CP) |
| ITPRD202A | Professional Issues in IT (10 CP) |

| Choose one elective from: | |
|---|---|
| ITICT202A | Wireless Networks (10 CP) |
| ITICT206A | Machine Learning (10 CP) |
| ITNET202A | Enterprise Security (10 CP) |
| ITPRD203A | Knowledge Management (10 CP) |

## YEAR 3 - LEVEL 300: SYNTHESIS

| SEMESTER 1: Complete all subjects | |
|---|---|
| ITDAT301A | Big Data and Advanced Data Concepts (10 CP) |
| ITDAT302A | Data Mining and Visualisation (10 CP) |
| ITNET311A | Major Group Project (10 CP) |

| SEMESTER 2: Complete all subjects | |
|---|---|
| ITDAT303A | Data and Network Security (10 CP) |
| ITDAT304A | Emerging Trends in Data Technology (10 CP) |
| ITNET312A | Major Individual project (10 CP) |

| YEAR 3 ELECTIVES | |
|---|---|
| **Complete one each semester in Year 3 (10CP)** | |
| ITICT303A | Distributed Computing (10 CP) |
| ITNET307A | National Data Infrastructure Security (10 CP) |
| ITNET308A | eCommerce and eGovernment Security (10 CP) |
| ITNET309A | Computer and Network Forensics (10 CP) |
| ITNET310A | Software Defined and Programmable Networks (10 CP) |

## HOW DO I APPLY AND ENROL?

For information about applying and enrolling go to: **tafensw.edu.au/degrees/bachelor-of-information-technology-data-engineering**

## WHAT IS 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**

## CAN I BE RECOGNISED FOR PREVIOUS STUDY AND EXPERIENCE?

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.

## CAN I ENROL IF I AM AN INTERNATIONAL STUDENT?

International students can enrol in most TAFE NSW degree courses, subject to meeting course entry requirements and satisfying student visa conditions.

More information for international students is available at: **tafensw.edu.au/international/study/courses/degrees**