BACHELOR OF
Information Technology
(Network Security)

Practical hands-on learning
Guaranteed small class sizes
Excellent individual learner support
No ATAR required for entry

nsi.edu.au/degrees
We prepare you

This professional degree prepares you for employment as a network security specialist in a fast growing and dynamic industry. It combines strong technical skills-based training with the analytical problem-solving focus of a higher education program.

Our strong industry involvement ensures that our training aligns with current government priorities and employer needs.

This is a three year full-time program with 20 hours per week face-to-face and the expectation of 20 hours per week independent study. Part-time options are also available.

What are the entry requirements?

Applicants are required to hold, at minimum, one of the following:

- NSW Higher School Certificate or equivalent
- recognized Tertiary Preparation Certificate
- Registered Training Organisation qualification at Certificate IV level or above
- completion of one year full-time or equivalent in a degree course at a higher education institution.

Assumed knowledge

NSW HSC mathematics or equivalent.

Applicants who meet the entry requirements but do not have the recommended level of assumed knowledge in mathematics can still apply, and if successful, will be advised to undertake a mathematics bridging program or preparatory course.

Recognition of prior learning?

Credit transfer is available for specified units of competency for applicants who have successfully completed a Diploma of Information Technology (Networking) or an Advanced Diploma of Information Technology (Network Security).

Previous industry experience or vendor certifications may also provide credit through Recognition of Prior Learning (RPL).

Applicants may apply for credit transfer or advanced standing at the time of application.

What will it cost?

Tuition fees are currently calculated per subject.

Visit www.highered.tafensw.edu.au for current fee details.

FEE-HELP is available to eligible Australian students. FEE-HELP is a student loan scheme provided by the Australian Government and is available to eligible fee paying students to pay all or part of their tuition fees. For further information visit www.tafensw.edu.au/degrees/fees

Campus location

You will be studying at the Northern Sydney Institute’s Meadowbank Campus. One of the largest campuses in Sydney, it is conveniently located close to Meadowbank railway station and wharf.
What will I be studying?

YEAR 1: LEVEL 100

SEMESTER 1
Fundamentals of computer organisation (ITICT101A)
Introduces the fundamentals of computer networks and computer security. Focus is on the appropriate use of terminology and communication in a technology environment.

Critical thinking for the IT professional (ITPRD101A)
Explores critical thinking techniques and systematic approaches and methods used to solve problems – including logic, discrete mathematics and algorithmic solutions.

Introduction to programming (ITICT102A)
Introduces the fundamentals of computer programming and how they can develop correct, readable and reusable solutions from problem specifications.

Internetworking 1 (ITICT103A)
Introduces the critical factors necessary for implementing, verifying, and troubleshooting routing operations in small-to-medium-sized networks.

SEMESTER 2
Internetworking 2 (ITICT104A)
Explores in detail, several different types of networks and network concepts, including VLANs, wireless networks, Wide Area Networks (WANs) and their associated technologies.

Communication for the IT professional (ITPRD102A)
Introduces the writing process of planning, drafting and editing with the aim of documents achieving their purpose and meeting the needs of their audience.

File systems and data concepts (ITICT105A)
Examines the theories associated with database management systems, the concepts of relational databases and database design and their application to real world contexts.

Introduction to cryptography (ITNET101A)
Explores the fundamentals of cryptography and discusses topics such as random number theory, stream and block ciphers, private and public-key encryption and various security protocols.

YEAR 2: LEVEL 200

SEMESTER 1
Advanced internetworking 1 (ITICT201A)
Examines the use of advanced internetworking solutions in various industry-related contexts and will explore the requirements for and appropriateness of various networking solutions.

Project management (group work) (ITPRD201A)
Introduces the field of project management – its theory, practice and development, the project life cycle, the role of the project manager and strategies for how to work and cooperate in teams.

Wireless networks (ITICT202A)
Introduces the key elements of WLAN technology including WLAN devices, WLAN operations, configuration, troubleshooting, maintenance and security.

Introduction to network security (ITNET201A)
Examines the theoretical and practical aspects of effective network management, network administration, threat and risk mitigation, and network security policies.

SEMESTER 2
Advanced internetworking 2 (ITICT203A)
Introduces Campus Networks and their effective design and implementation, as well as High Availability networks, VLANs, Inter-LAN routing and Spanning Tree technologies.

Professional issues in IT (ITPRD202A)
Introduces a range of issues that arise in the IT environment and that regularly challenge IT professionals, particularly legal, social and ethical issues.

Enterprise security (ITNET202A)
Examines secure network architecture, relevant standards and protocols, encryption, authentication, access control, WLAN, email, IP security and security management.

SEMESTER 2
Advanced network security 1 (ITNET203A)
Identifies and implements basic and best practice security techniques to protect mobile devices and discuss various standards for mobile security.

Internetworking troubleshooting (ITICT301A)
Engages in a detailed and in-depth examination of advanced network security issues, with a focus on security analysis, penetration testing, and intrusion detection and prevention.

Major security project 1 (ITNET303A)
Students will work in small groups and with a member of the academic staff to identify and develop their own security-related project.

And one elective chosen from:
- National data infrastructure security (ITNET307A)
- eCommerce and eGovernment security (ITNET308A)
- Computer and network forensics (ITNET309A)

YEAR 3: LEVEL 300

SEMESTER 1
Mobile computing and security (ITNET301A)
Identifies and implements basic and best practice security techniques to protect mobile devices and discuss various standards for mobile security.

And one elective chosen from the list not already selected in year 3 semester 1.

SEMESTER 2
Advanced network security 2 (ITNET304A)
Examines secure network architecture, relevant standards and protocols, encryption, authentication, access control, WLAN, email, IP security and security management.

Emerging technologies security (ITNET305A)
Examines emerging technologies and the specific security risks that are associated with them.

Major security project 2 (ITNET306A)
Students will have the opportunity to undertake a complex security project as an individual.

And one elective chosen from:
- Computer and network forensics (ITNET309A)
- Virtualisation (ITICT205A)
How do I apply?

All applicants are required to submit an essay and attend an interview. Applications are made directly to the Northern Sydney Institute. There is no need to apply through University Admission Centre (UAC) and no ATAR is required.

Download application

Application forms may be downloaded from www.highered.tafensw.edu.au

Send to

Student Administration – Higher Education
The Northern Sydney Institute, Meadowbank Campus, See St., Meadowbank, NSW 2114
Email: NSI.ITdegree@tafensw.edu.au

Further enquiries

Call 0418 799 567

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