



Bachelor of Networking and Telecommunications (BNeT) 0101638

CRICOS Code	0101638
National Course Id	CRS1400451
Full Time	3 years
Part Time	6 years (Domestic students only – see below)
Units	24
Campus	Level 16, 233 Castlereagh Street, Sydney 2000
ILETS Academic	6.0 overall with no band less than 6.0
Delivery mode	Face to Face
Outcome	Bachelor of Networking and Telecommunication

Course Description

The Bachelor of Networking and Telecommunications (BNeT) course is grounded in foundational mathematics, programming, networking and telecommunications units. These skills and knowledge are then built on in a series of units covering the main areas of today's Networking and Telecommunications industry, including the following: cloud computing; wireless and mobile technologies; operating systems; IP networks; switched and routed networks; optical transmission networks; MPLS networking; and Voice over IP.

Career Outcomes

A career in one of the fastest growing professions. The rapid development and evolution in global information structures, cloud, web, and mobile technologies has seen businesses (Telcos, retailers, banks, educational institutions and so on) all face major challenges in providing networks that are accessible and secure. The need for specialists who can design, build, maintain, support, and protect these networks is growing.

Accreditation

The Bachelor of Networking and Telecommunications is accredited by the Tertiary Education Quality and Standards Agency (TEQSA):

<https://www.teqsa.gov.au/national-register/course/polytechnic-institute-australia-pty-ltd-2>

The Diploma of Networking Technology is accredited by the Tertiary Education Quality and Standards Agency (TEQSA):

<https://www.teqsa.gov.au/national-register/course/polytechnic-institute-australia-pty-ltd-3>

Course Learning Outcomes

Having successfully completed the Bachelor of Networking and Telecommunications, you should be able to:

1. A demonstrate your understanding of a body of knowledge including recent developments in the area of networking and telecommunications networks
2. Demonstrate a developed understanding of the principles of networks and telecommunications engineering

Bachelor of Networking and Telecommunications (BNeT) 0101638

3. Demonstrate an understanding of the principles underlying the planning and management of networks and telecommunications
4. Apply mathematical and computational skills necessary for the solution of theoretical and practical problems
5. Demonstrate creativity and initiative in application of analytical, problem-solving and design skills to networks and telecommunications
6. To successfully work independently with personal accountability in solving problems in networks and telecommunications
7. Demonstrate high-level oral and written communication skills
8. To apply your knowledge to design, investigate and solve specific problems in the area of networking and telecommunications and their applications through directed studies or projects in the form of internships with industry or research providers.

Course Structure

UNIT CODE		UNIT NAME	CORE / ELECTIVE	PRE-REQUISITES
YEAR 1 (Semester 1 or 2)				
1	ICT100	Fundamentals of computer system hardware and software	Core	None
1	NTW100	Introduction to computer networking	Core	None
1	ICT101	Mathematics for computing	Core	NSW HSC Band 4 for English and Band 3 in Advanced Mathematics or Band 4 in Standard 2 Mathematics or equivalent
1	GBU100	Professional Business Communications	Core	None
2	NTW101	Principles of network administration	Core	NTW100
2	ICT102	Foundations of programming	Core	None
2	ICT103	Introduction to telecommunications systems	Core	None
2	GBU200	Business ethics and corporate social responsibility	Core	None
YEAR 2 (Semester 1 or 2)				
1	ICT200	Cloud computing	Core	ICT102, ICT103, NTW100
1	NTW202	Mobile and wireless technologies	Core	ICT103, NTW100
1	ICT201	Operating Systems and administration	Core	ICT100, ICT101
1	NTW201	Scalable IP networks	Core	ICT103, NTW100
2	NTW200	Implementing switched and routed networks	Core	NTW100, NTW101
2	NTW203	Network Security	Core	NTW101
2	ICT202	Enterprise virtualisation	Core	ICT103, NTW100
2	ICT300	Broadband access technologies and networks	Core	ICT103, NTW100

Bachelor of Networking and Telecommunications (BNeT) 0101638

YEAR 3 (Semester 1 or 2)				
1	NTW300	Optical transmission networks	Core	ICT103, NTW100
1	NTW301	Multiprotocol Label Switching (MPLS) Networking	Core	NTW201
1	NTW302	Interior routing protocols and their implementation	Core	NTW201
1	NTW303	Telecommunications network management	Core	NTW101
2	PDV300	ICT Project	Core	ICT101, GBU100, ICT102, ICT200, NTW202, ICT201, NTW201, NTW200, NTW203, ICT202, and ICT300
2	ITC303	Unified Communications	Core	ICT103, NTW100
2	ITC304	Long Term Evolution (LTE) Technologies	Elective	NTW202
	NTW304	Border gateway protocols (BGP)	Elective	NTW302
	NTW305	Virtual private LAN services (VPLS)	Elective	NTW301
	NTW306	Quality of service (QOS)	Elective	NTW301, NTW302
	NTW307	Optical network design and planning	Elective	NTW300
	NTW308	Radio network design and planning	Elective	NTW202

Please Note

- The program is available each intake but note that some units of study are subject to quotas and minimum enrolment requirements.
- Not all units of study are available every semester, and changes in course structure occur from time to time.

Exit Outcomes

To obtain the Bachelor of Networking and Telecommunications (BNeT), candidates are required to successfully complete all 24 units (with a minimum of 12 units, 50%, completed at the Institute). Not all units are offered each semester. If you complete the 8 100 level units with the Institute (either at the Institute or with Advanced Standing not exceeding 4 of the 100 level units), you will be eligible to obtain the Diploma of Networking Telecommunications (DipNT).

International Student Duration

The CRICOS-registered duration is 156 weeks or 3 years of full-time study (6 semesters). Please note the part time mode is not available to a holder of a student visa, who is not a citizen of Australia or New Zealand, or who is not an Australian permanent resident, or who is a temporary resident of Australia.

Domestic Student Duration

For domestic students the BNeT course is 3 years full-time or 6 years part-time.

Delivery Method

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Page 3 of 4

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Bachelor of Networking and Telecommunications (BNeT) 0101638

Face-to-face on campus.

Assessment Methods

The Institute uses authentic assessment principles that may include practical exercises, case studies, presentations, reports, online simulations, essays, and examinations. These may include being done under invigilation.

Entry Requirements

- Completion of Year 12, or equivalent, with a minimum ATAR of 60 **AND**
- NSW (or equivalent) Band 4 Standard English; and
- NSW (or equivalent) Band 3 Advanced Mathematics; or
- NSW (or equivalent) Band 4 Standard 2 Mathematics.
- An equivalent secondary qualification overseas that also meets the mathematics requirement above; or
- An accredited Tertiary Preparation Program or a Foundation Year Program offered by an accredited Australian provider that also meets the mathematics requirement above; or
- One year of completed accredited full-time study at a registered institution of tertiary education at AQF level 5 or above that also meets the mathematics requirement above.

Language requirements

The Institute requires that the applicant must supply one of the following qualifications as a condition for admission:

- IELTS (Academic Module): Overall score 6.0 with no band less than 6.0; or
- TOEFL: internet 80, with no section scoring less than 20; or
- Pearson Test of English (PTE): Overall score of 57, with no section scoring less than 50; or
- University of Cambridge - Advanced (CAE): Total score of 52.

The date of application for admission must not be 2 or more years from the date of the test result. If the applicant has undertaken multiple tests, then the most recent test will be the only result considered.

