

Handbook 2020

Coursecode

G1059

GRADUATE DIPLOMA IN INTERNETWORKING AND SECURITY

Murdoch University

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Cancellation of Courses, Majors, Minors and Units

The University reserves the right to cancel, without notice, any course, major, minor or unit if the number of students enrolled falls below limits set by the University or in other unforeseen circumstances.

Alternative Formats

Handbook home page:

<http://handbook.murdoch.edu.au>

This publication can also be provided in alternative formats by contacting the Equity and Social Inclusion Office at Murdoch University

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| Group | Course | Offerings |
|--|---|-----------------------------|
| Graduate Coursework Degrees and Professional Doctorates | | |
| Information Technology | Graduate Diploma in Internetworking and Security (GradDipIntwkSecur) | • Murdoch campus (internal) |

INFORMATION TECHNOLOGY

GRADUATE DIPLOMA IN INTERNETWORKING AND SECURITY (GRADDIPINTWKSECUR)

Employment Prospects:

The following employers are increasingly concerned with network performance and security: network service providers, banking and finance organisations, government and the military. There is also scope to work as an independent network and security consultant.

Further Study:

Students who successfully complete the Graduate Diploma may apply for admission to the Master of Information Technology.

Special Requirements:

The course is available by on-campus attendance only. Internet access is required for all students.

Graduate Diploma in Networking and Security (GradDiplntwkSecur)

Duration: 1 year full-time (if commencing in Semester 1) or part-time equivalent subject to unit availability. Students commencing mid-year (Semester 2) will need 1.5 years minimum enrolment (a total of 3 semesters) to complete requirements.

The Graduate Diploma in Networking and Security provides a thorough and practical grounding in network design, network administration, network management and security. The course structure is flexible allowing students to choose units that target their skills in security, LAN and Wireless network design, global network design or network management and tailor the course to meet their career needs.

Most specialisations prepare students to sit one or more industry certification exams. These certifications include Cisco Certified Network Associate (CCNA), Certified Wireless Network Administrator (CWNA), Cisco Certified Network Professional (CCNP).

Availability:

- Murdoch campus (internal)

Mathematics and Statistics

Admission Requirements (Onshore):

Recognised Australian Computer Society (ACS) accredited Bachelor's degree in IT (AQF Level 7);

OR recognised Bachelor's degree (AQF Level 7) plus an approved qualification in IT (AQF Level 8);

OR recognised Bachelor's degree (AQF Level 7) plus two years of relevant IT experience;

OR recognised Honours degree (AQF Level 8) plus relevant IT experience.

Recognition of relevant and current informal or non-formal learning may be used for entry requirements, and should be discussed with the Academic Chair.

Students who have completed the BSc in Networking and Security may not enrol in this course.

Restriction: All graduate courses are subject to restriction.

Course Codes: G1059

Course Structure - 24 credit points

Core Units - 18 credit points

ICT521 IT Professional Practice - 3 points
MURDOCH: S1-internal, S2-internal

ICT603 Wireless Data Communications - 3 points
MURDOCH: S2-internal

ICT546 Local Area Network Design and Implementation - 3 points
MURDOCH: S1-internal, S2-internal

ICT535 Advanced Business Data Communications - 3 points
MURDOCH: S2-internal

ICT502 Applied Information Security Management - 3 points
MURDOCH: S2-internal, S2-external

ICT508 Information Technology Project Management - 3 points
MURDOCH: S1-internal

Specified Electives - 6 credit points

ICT501 Business Analysis and Systems Development Approaches - 3 points
MURDOCH: S2-internal, S2-external

ICT505 Knowledge Management - 3 points
MURDOCH: S2-internal

ICT513 Data Analytics - 3 points
MURDOCH: S2-internal, S2-external

ICT515 Foundations of Data Science - 3 points
MURDOCH: S2-internal

ICT601 Business Analytics - 3 points
MURDOCH: S2-internal

ICT602 Advanced Data Analysis - 3 points
MURDOCH: S1-internal

ICT612 Human Factors in Information Technology - 3 points
MURDOCH: S1-internal

ICT615 Information Technology Research Methods - 3 points
MURDOCH: S1-internal

ICT616 Data Resources Management - 3 points
MURDOCH: S1-internal, S2-internal

ICT619 Artificial Intelligence - 3 points
MURDOCH: S1-internal

ICT622 Information Technology Strategy - 3 points
MURDOCH: S2-internal

TLC501 Communication Skills for Postgraduate Study - 3 points
MURDOCH: S1-internal, S2-internal

PREREQUISITES

Advanced Business Data Communications (ICT535)

ICT546 Local Area Network Design and Implementation and enrolment in a graduate-level IT course.

Advanced Data Analysis (ICT602)

ICT515 Foundations of Data Science or ICT513 Data Analytics.

Applied Information Security Management (ICT502)

Enrolment in a graduate IT course or permission of the Academic Chair.

Artificial Intelligence (ICT619)

Enrolment in a graduate-level IT course.

Business Analysis and Systems Development Approaches (ICT501)

Enrolment in a graduate IT course or in G1074 Graduate Diploma in Games and App Production or permission of the Academic Chair.

Business Analytics (ICT601)

Enrolment in a graduate-level Information Technology course. No specific unit prerequisites, but some familiarity with fundamentals of programming and database theory and practice would be helpful.

Communication Skills for Postgraduate Study (TLC501)

Nil.

Data Analytics (ICT513)

Prior studies equivalent to MAS183 Statistical Data Analysis and enrolment in a Graduate IT course or permission of the Academic Chair.

Data Resources Management (ICT616)

Enrolment in a graduate-level IT course.

Foundations of Data Science (ICT515)

Enrolment in an IT graduate course or permission of the Academic Chair.

Human Factors in Information Technology (ICT612)

Enrolment in a graduate-level IT course.

IT Professional Practice (ICT521)

Enrolment in a graduate-level IT course or permission of the Academic Chair.

Information Technology Project Management (ICT508)

Enrolment in a graduate IT course or permission of the Academic Chair.

Information Technology Research Methods (ICT615)

Enrolment in a graduate IT course or permission of the Academic Chair.

Information Technology Strategy (ICT622)

Enrolment in a graduate IT course.

Knowledge Management (ICT505)

Enrolment in a graduate-level IT course or permission of the Academic Chair.

Local Area Network Design and Implementation (ICT546)

Enrolment in a graduate-level IT course.

Wireless Data Communications (ICT603)

ICT546 Local Area Network Design and Implementation and completion of 12 or more points in an IT graduate course.