

Handbook 2020

Coursecode

B1317

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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Cancellation of Courses, Majors, Minors and Units

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Group	Course	Offerings
Cyber Forensics, Information Security and Management	Cyber Security and Forensics (BSc)	<ul style="list-style-type: none"> • Murdoch campus (internal) • Murdoch campus (external) • Kaplan Higher Education Institute and Kaplan Higher Education Academy (Singapore) ['KAPLAN-SGP'] (internal) (language of instruction: English) • Murdoch University Dubai (UAE) ['DUBAI-ISC'] (internal)

CYBER FORENSICS, INFORMATION SECURITY AND MANAGEMENT

CYBER SECURITY AND FORENSICS (BSC)

Recommended Double Majors:

Computer Science; Internetworking and Network Security

Excluded Minors:

Computer Forensics and Computer Security; Computer Forensics and Information Security Policy

Admission Requirements (Onshore):

As per normal undergraduate admission requirements.

Bachelor of Science (BSc) in Cyber Security and Forensics

Murdoch's Bachelor of Science is a flexible degree which gives you the opportunity to build deep understanding and practical experience as well as to supplement your studies by engaging with industry and the community on relevant problems. You can even undertake studies through another discipline to broaden your understanding of the way in which science operates in relation to social, business, health and policy environments.

Course Codes: B1317 B1317A

Mathematics and Statistics

Availability:

- Murdoch campus (internal)
Murdoch campus (external)
Kaplan Higher Education Institute and Kaplan Higher Education Academy (Singapore) ['KAPLAN-SGP'] (internal) (language of instruction: English)
Murdoch University Dubai (UAE) ['DUBAI-ISC'] (internal)

Employment Prospects:

Graduates may expect to take up appointment in a broad range of employment areas, including: Computer Information Consultant; Computer Intelligence Officer; Computer Support Officer; Cyber Forensic Investigator; Database Developer/Administrator; Forensic Auditor; Help Desk Officer; Internet Security Officer; IT Consultant; Systems Administrator; Systems/Business Analyst.

Increasingly, government and corporate organisations need to identify information security risks and interdependencies between business functions. Escalating security threats to organisations' information assets and increasing needs for organisations to comply with governance of information management have resulted in organisations requiring well-trained ICT professionals capable of addressing three key issues: managing information; protecting information; and forensic investigation of information security incidents. Graduates of this major will be well suited to meet these important industry demands.

Duration: 3 years full-time or part-time equivalent

Course Structure - 72 credit points

Part I - 24 credit points

Year 1 - 24 credit points

Transition Unit - 3 credit points

ICT100 Transition to IT - 3 points
MURDOCH: S1-internal, S1-external, S2-internal, S2-external

OR (for Kaplan and Dubai students only)

BBS100 Academic Skills for Business - 3 points
DUBAI-ISC: TJD-internal, TMD-internal, TSD-internal

Breadth Unit for Degree - 3 credit points

MSP100 Career Learning: Managing Your Career - 3 points
MURDOCH: S1-external, S2-external
DUBAI-ISC: TJD-internal, TMD-internal, TSD-internal

Core Units - 15 credit points

ICT171 Introduction to Server Environments and Architectures - 3 points
MURDOCH: S1-internal, S1-external
DUBAI-ISC: TMD-internal

ICT159 Foundations of Programming - 3 points
MURDOCH: S1-internal, S1-external
DUBAI-ISC: TJD-internal, TMD-internal, TSD-internal

ICT169 Foundations of Data Communications - 3 points
MURDOCH: S2-internal, S2-external
DUBAI-ISC: TMD-internal

MAS162 Foundations of Discrete Mathematics - 3 points
MURDOCH: S1-internal, S1-external, S2-internal, S2-external
DUBAI-ISC: TMD-internal

ICT170 Foundations of Computer Systems - 3 points
MURDOCH: S2-internal, S2-external
DUBAI-ISC: TJD-internal, TSD-internal

General Electives - 3 credit points

Select from any 100-level units offered by the University, subject to individual unit prerequisites. Students are advised to consider using General Elective points to meet the requirements of a second major or minor. Any recommended double majors and minors will be included in the major's description.

Part II - 48 credit points

University-Wide Breadth Unit - 3 credit points

Select from the prescribed list of University-Wide Breadth Units. A unit cannot be used to satisfy both this Breadth Unit requirement and the requirements of a major or minor. If taken at 100 level the unit(s) will be attributed to Part I. Note that no more than 30 credit points at Part I may be credited towards course completion requirements.

Year 2 - 21 credit points

Research Skills Unit - 3 credit points

BSC203 Introduction to ICT Research Methods - 3 points
MURDOCH: S1-internal, S1-external
DUBAI-ISC: TMD-internal
KAPLAN-SGP: TMA-internal

Core Units - 9 credit points

ICT284 Systems Analysis and Design - 3 points
MURDOCH: S1-internal, S1-external
DUBAI-ISC: TMD-internal
KAPLAN-SGP: TMA-internal

ICT287 Computer Security - 3 points
MURDOCH: S1-internal, S1-external
DUBAI-ISC: TJD-internal, TSD-internal
KAPLAN-SGP: TJA-internal, TSA-internal

ICT285 Databases - 3 points
MURDOCH: S2-internal, S2-external
DUBAI-ISC: TJD-internal, TSD-internal
KAPLAN-SGP: TJA-internal, TSA-internal

General Electives - 9 credit points

Select from any 200- to 400-level units offered by the University, subject to individual unit prerequisites. Students are advised to consider using General Elective points to meet the requirements of a second major or minor. Any recommended double majors and minors will be included in the major's description.

Year 3 - 24 credit points

Research Skills Unit - 3 credit points

BSC301 Applied Research Skills in ICT - 3 points
MURDOCH: S1-internal, S1-external
DUBAI-ISC: TJD-internal, TSD-internal

KAPLAN-SGP: TJA-internal, TSA-internal

Core Units - 12 credit points

ICT378 Cyber Forensics and Information Technology - 3 points
MURDOCH: S1-internal, S1-external
DUBAI-ISC: TMD-internal
KAPLAN-SGP: TMA-internal

ICT379 Security Architectures and Systems Administration - 3 points
MURDOCH: S2-internal, S2-external
DUBAI-ISC: TMD-internal
KAPLAN-SGP: TMA-internal

ICT380 Information Security Policy and Governance - 3 points
MURDOCH: S1-internal, S1-external
DUBAI-ISC: TJD-internal, TSD-internal
KAPLAN-SGP: TJA-internal, TSA-internal

ICT302 IT Professional Practice Project - 3 points
MURDOCH: S1-internal, S1-external, S2-internal, S2-external
DUBAI-ISC: TJD-internal, TMD-internal, TSD-internal
KAPLAN-SGP: TJA-internal, TMA-internal, TSA-internal

General Electives - 9 credit points

Select from any 200- to 400-level units offered by the University, subject to individual unit prerequisites. Students are advised to consider using General Elective points to meet the requirements of a second major or minor. Any recommended double majors and minors will be included in the major's description.

PREREQUISITES

Academic Skills for Business (BBS100)

Enrolment in Bachelor of Business, Bachelor of Commerce, Bachelor of Economics, Bachelor of Business in Applied Accounting, or Bachelor of Digital Marketing and Media, Bachelor of Business in Sustainability, or Bachelor of Science, or Bachelor of Arts

Applied Research Skills in ICT (BSC301)

BSC203 Introduction to ICT Research Methods and enrolment in one of the following Information Technology majors: Computer Science or Business Information Systems or Cyber Forensics and Information Security or Games Software Design and Production, or Games Technology or Internetworking and Network Security or Mobile and Web Application Development.

Career Learning: Managing Your Career (MSP100)

Nil.

Computer Security (ICT287)

ICT171 Introduction to Server Environments and Architecture AND ICT159 Foundations of Programming OR enrolment in a postgraduate IT course.

Cyber Forensics and Information Technology (ICT378)

ICT171 Introduction to Server Environments and Architecture or enrolment in a postgraduate IT course.

Databases (ICT285)

ICT102 Introduction to Computer Science or ICT159 Foundations of Programming or ICT170 Foundations of Computer Systems.

Foundations of Computer Systems (ICT170)

Nil.

Foundations of Data Communications (ICT169)

Nil.

Foundations of Discrete Mathematics (MAS162)

MAS164 Fundamentals of Mathematics/MAS182/MAS161 OR a final scaled score of 55% or more in ATAR Mathematics Applications or WACE Mathematics 2C/2D OR a final scaled score of 50% or more in ATAR Mathematics Methods or WACE Mathematics 3A/3B (or higher) OR equivalent.

Foundations of Programming (ICT159)

Nil.

IT Professional Practice Project (ICT302)

Students must be enrolled in an IT major and have accumulated 56 credit points. Students should also have passed ICT290 Games Design and Programming, OR ICT284 Systems Analysis and Design and ICT285 Databases.

Information Security Policy and Governance (ICT380)

ICT284 Systems Analysis and Design OR ICT287 Computer Security OR ICT378 Cyber Forensics and Information Technology OR ICT379 Security Architecture and Systems Administration.

Introduction to ICT Research Methods (BSC203)

BSC100 Building Blocks for Science OR ICT100 Transition to IT, AND enrolment in one of the following Information technology majors: Computer Science or Business Information Systems or Cyber Forensics and Information Security or Games Software Design and Production, or Games Technology or Internetworking and Network Security or Mobile and Web Application Development.

Introduction to Server Environments and Architectures (ICT171)

Nil.

Security Architectures and Systems Administration (ICT379)

ICT287 Computer Security.

Systems Analysis and Design (ICT284)

ICT102 Introduction to Computer Science OR ICT159 Foundations of Programming OR ICT107 Principles of Information Systems OR ICT158 Introduction to Information Systems or enrolment in a postgraduate IT course.

Transition to IT (ICT100)

Enrolment in the Bachelor of IT & Business or the Bachelor of Science (IT majors).

Personal Study Plan

Unit Sets:

Year	Semester 1	Semester 2
1		
2		
3		
4		