ACCG8076

Forensic and Data Analytics

Session 1, Online-scheduled-weekday 2025

Department of Accounting and Corporate Governance

Contents

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General Information

Unit convenor and teaching staff
Kathleen Clough
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Credit points
10

Prerequisites
ACCG6011 or ACCG611 or (admission to MActPrac or MBkgFin or MBusAnalytics or GradCertForAccg or GradDipForAccg or MForAccgFinCri)

Corequisites

Co-badged status

Unit description
In this unit students will be exposed to the theory and application of data analytics skills and techniques in relation to fraud detection and identifying business risks. The unit will introduce students to mechanisms and principles relevant to tracing assets, investigating flow of funds and reconstructing accounting information. Visual and location analytic capabilities that use a variety of tools and techniques, along with external data sets, will be explored. The unit will also equip students with the capacity to appraise applications and strategies to enable collection, assessment, review, production and presentation of unstructured data.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

Learning Outcomes

On successful completion of this unit, you will be able to:

ULO1: Evaluate the theory, and principles of application, of data analytics skills and techniques relevant to forensic accounting.

ULO2: Investigate applications and strategies, including data mining, to enable collection, assessment, review, production and presentation of unstructured data.

ULO3: Manage and interpret complex or disparate sets of data to underpin business development, interpret risk, understand behavioural patterns, and detect suspicious or irregular behaviour.

ULO4: Examine issues and key principles of professional digital forensic practice, including chain of custody and best practice procedures.

ULO5: Diagnose and appraise mechanisms to uncover or recover evidence from digital devices to support litigation and investigations.

Assessment Tasks

Name	Weighting	Hurdle	Due
Formal and observed learning: Test	40%	No	Week 9
Professional practice: Fraud detection	30%	No	Week 7
Skills development: Assessing fraud	30%	No	Weekly

Formal and observed learning: Test

Assessment Type [1]: Quiz/Test
Indicative Time on Task [2]: 30 hours
Due: **Week 9**
Weighting: **40%**

The purpose of this assessment is for you to demonstrate your understanding and knowledge of key topics from the unit. You will participate in a formal test. Feedback on this test will help you assess your progress through the unit content. **Deliverable:** Test Individual assessment

On successful completion you will be able to:

- Evaluate the theory, and principles of application, of data analytics skills and techniques relevant to forensic accounting.
- Investigate applications and strategies, including data mining, to enable collection, assessment, review, production and presentation of unstructured data.
- Manage and interpret complex or disparate sets of data to underpin business development, interpret risk, understand behavioural patterns, and detect suspicious or irregular behaviour.
- Examine issues and key principles of professional digital forensic practice, including chain of custody and best practice procedures.
- Diagnose and appraise mechanisms to uncover or recover evidence from digital devices to support litigation and investigations.

Professional practice: Fraud detection

Assessment Type [1]: Case study/analysis
Indicative Time on Task [2]: 25 hours
Due: **Week 7**
Weighting: **30%**

The purpose of this assessment is for you to develop critical professional expertise in fraud detection.   You will collaboratively apply theoretical concepts and frameworks to analyse real-world fraudulent schemes.   **Skills in focus:** - Analytical skills - Problem solving - Digital skills **Deliverable**: Written submission Group assessment

On successful completion you will be able to:

- Evaluate the theory, and principles of application, of data analytics skills and techniques relevant to forensic accounting.
- Investigate applications and strategies, including data mining, to enable collection, assessment, review, production and presentation of unstructured data.
- Manage and interpret complex or disparate sets of data to underpin business development, interpret risk, understand behavioural patterns, and detect suspicious or irregular behaviour.

Skills development: Assessing fraud

Assessment Type [1]: Practice-based task
Indicative Time on Task [2]: 20 hours
Due: **Weekly**
Weighting: **30%**

The purpose of this assessment is for you to consistently build your expertise in assessing financial fraud throughout the unit.   You will consolidate and evaluate your learning throughout the session via a structured approach.   **Skills in focus:** - Critical Thinking - Global Ethical awareness - Communication   **Deliverable:** Written submission [max: 1,500 words] Individual assessment

On successful completion you will be able to:

- Evaluate the theory, and principles of application, of data analytics skills and techniques relevant to forensic accounting.

- Investigate applications and strategies, including data mining, to enable collection, assessment, review, production and presentation of unstructured data.

- Manage and interpret complex or disparate sets of data to underpin business development, interpret risk, understand behavioural patterns, and detect suspicious or irregular behaviour.

- Examine issues and key principles of professional digital forensic practice, including chain of custody and best practice procedures.

- Diagnose and appraise mechanisms to uncover or recover evidence from digital devices to support litigation and investigations.

[1] If you need help with your assignment, please contact:

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment

- the Writing Centre for academic skills support.

[2] Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

Delivery and Resources

Textbook: Kranacher, Riley: *Forensic Accounting and Fraud Examination*, 3rd Edition

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://policies.mq.edu.au). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- Academic Appeals Policy
- Academic Integrity Policy
- Academic Progression Policy
- Assessment Policy
- Fitness to Practice Procedure
- Assessment Procedure
- Complaints Resolution Procedure for Students and Members of the Public
- Special Consideration Policy

Students seeking more policy resources can visit Student Policies (https://students.mq.edu.au/support/study/policies). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit Policy Central (https://policies.mq.e

du.au) and use the search tool.

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/admin/other-resources/student-conduct

Results

Results published on platform other than eStudent, (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in eStudent. For more information visit connect.mq.edu.au or if you are a Global MBA student contact globalmba.support@mq.edu.au

Academic Integrity

At Macquarie, we believe academic integrity – honesty, respect, trust, responsibility, fairness and courage – is at the core of learning, teaching and research. We recognise that meeting the expectations required to complete your assessments can be challenging. So, we offer you a range of resources and services to help you reach your potential, including free online writing an d maths support, academic skills development and wellbeing consultations.

Student Support

Macquarie University provides a range of support services for students. For details, visit http://stu dents.mq.edu.au/support/

The Writing Centre

The Writing Centre provides resources to develop your English language proficiency, academic writing, and communication skills.

- Workshops
- Chat with a WriteWISE peer writing leader
- Access StudyWISE
- Upload an assignment to Studiosity
- Complete the Academic Integrity Module

The Library provides online and face to face support to help you find and use relevant information resources.

- Subject and Research Guides
- Ask a Librarian

Student Services and Support

Macquarie University offers a range of Student Support Services including:

- IT Support

- Accessibility and disability support with study

- Mental health support

- Safety support to respond to bullying, harassment, sexual harassment and sexual assault

- Social support including information about finances, tenancy and legal issues

- Student Advocacy provides independent advice on MQ policies, procedures, and processes

Student Enquiries

Got a question? Ask us via the Service Connect Portal, or contact Service Connect.

IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the Acceptable Use of IT Resources Policy. The policy applies to all who connect to the MQ network including students.

Unit information based on version 2025.03 of the Handbook