

#### **COURSE OUTLINE**

# SEC703 Complex Cyber Investigations Management

School: School of Science, Technology and Engineering

Online

Online

You can do this course without coming onto campus.

Please go to usc.edu.au for up to date information on the teaching sessions and campuses where this course is usually offered.

#### What is this course about?

#### 1.1. Description

Cyber investigation managers must plan and execute investigations into various genres of digitized deviancy, identifying and securing physical and witness evidence as well as digital evidence. Good management practice includes understanding digital deviancy; recognizing the demands of investigation as a profession; and managing processes such as systemic thinking, decision making, risk recognition, and resource allocation. This online course will introduce you to the complexities surrounding investigation decision-making processes, definitions of digital deviancy, as well as the limits and boundaries of investigative procedures and methodologies.

#### 1.2. How will this course be delivered?

| ACTIVITY  | HOURS | BEGINNING WEEK | FREQUENCY |
|---|-------|----------------|-----------|
| ONLINE  |       |                |           |
| <b>Online</b> – The course is delivered via online materials and tutorial classes managed synchronously online. Learners are expected to spend 10-12 hours per week studying this course. | 10hrs | Week 1         | 13 times  |

#### 1.3. Course Topics

Managing a complex cyber investigation is not just about managing digital evidence acquisition. This course comprises three modules: 1-the problem; 2 – the profession; 3 – the processes.

#### **MODULE 1 – The Problem**

What should be investigated (cybercriminology)?

What should be investigated (strategic practice)?

#### MODULE 2 - The Profession

Is investigation a profession?

What ethical issues are engaged during an investigation?

How can investigation be managed ethically?

#### **MODULE 3 - The Processes**

How are risks and resources managed?

How are investigation decisions made?

What legal frameworks are engaged by investigation management?

What happens when an investigation reacehs the border?

How are internal investigations managed?

Course review

## 2. What level is this course?

700 Level (Specialised)

Demonstrating a specialised body of knowledge and set of skills for professional practice or further learning. Advanced application of knowledge and skills in unfamiliar contexts.

## 3. What is the unit value of this course?

12 units

## 4. How does this course contribute to my learning?

| COU | RSE LEARNING OUTCOMES  | GRADUATE QUALITIES  |
|-----|--|---|
| Ons | successful completion of this course, you should be able to  | Completing these tasks successfully will contribute to you becoming |
| 1   | Demonstrate understanding of professional investigation management and professional practice   | Knowledgeable<br>Ethical  |
| 2   | Demonstrate in-depth knowledge of the management of securing and presenting evidence relating to cybercrime and digital data integrity breaches.     | Knowledgeable   |
| 3   | Critically analyse the role of digital deviancy and its investigation in society including how each might be a source of criminal and/or social harm | Knowledgeable<br>Creative and critical thinker                      |
| 4   | Use decision-making and problem-solving  | Empowered<br>Ethical  |
| 5   | Communicate research and findings to specialist and non-specialist audiences.  | Empowered   |

## 5. Am I eligible to enrol in this course?

Refer to the UniSC Glossary of terms for definitions of "pre-requisites, co-requisites and anti-requisites".

#### 5.1. Pre-requisites

SEC701

## 5.2. Co-requisites

Not applicable

## 5.3. Anti-requisites

Not applicable

## 5.4. Specific assumed prior knowledge and skills (where applicable)

Students will be assumed to understand technology and its role in society. They will be expected to have a working knowledge of computer systems and networks.

# 6. How am I going to be assessed?

## 6.1. Grading Scale

Standard Grading (GRD)

 $\label{eq:high-post} \mbox{High Distinction (HD), Distinction (DN), Credit (CR), Pass (PS), Fail (FL).}$ 

## 6.2. Details of early feedback on progress

Using marking rubrics, students will participate in continuous peer and self-assessment during tutorials

#### 6.3. Assessment tasks

| DELIVERY<br>MODE | TASK<br>NO. | ASSESSMENT<br>PRODUCT | INDIVIDUAL<br>OR GROUP | WEIGHTING<br>% | WHAT IS THE<br>DURATION /<br>LENGTH? | WHEN SHOULD I<br>SUBMIT? | WHERE SHOULD I<br>SUBMIT IT?                             |
|------------------|-------------|-----------------------|------------------------|----------------|--------------------------------------|--------------------------|--|
| All              | 1a          | Quiz/zes              | Individual             | 10%            | 10 multiple choice questions         | Week 4                   | Online Test (Quiz)                                       |
| All              | 1b          | Written Piece         | Individual             | 10%            | 1000 words                           | Week 4                   | Online Assignment<br>Submission with<br>plagiarism check |
| All              | 2           | Written Piece         | Individual             | 30%            | 2000 words                           | Week 6                   | Online Assignment<br>Submission with<br>plagiarism check |
| All              | 3           | Written Piece         | Individual             | 50%            | 4000 written paper                   | Week 13                  | Online Assignment<br>Submission with<br>plagiarism check |

#### All - Assessment Task 1a: Knowledge check quiz

| GOAL:     | The goal of this task is to demonstrate knowledge and understanding of basic cybercriminology coopening weeks of the course. | oncepts introduced in the |
|-----------|--|---------------------------|
| PRODUCT:  | Quiz/zes   |                           |
| FORMAT:   | Quiz   |                           |
| CRITERIA: | No.  | Learning Outcome assessed |
|           | 1 Answer ten questions randomly selected from a pool of questions.   | 1                         |
|           |  |                           |

#### All - Assessment Task 1b: Written piece

| GOAL:    | The goal of this task is to demonstrate knowledge and understanding of basic cybercriminology concepts introduced in the opening weeks of the course. |
|----------|---|
| PRODUCT: | Written Piece   |
| FORMAT:  | More information available on Blackboard Learning Management System   |

| CRITERIA: | No. |  | Learning Outcome assessed |
|-----------|-----|--|---------------------------|
|           | 1   | Learners will describe and explain how a theoretical model might be used to inform the work of a cyber investigations manager. | 135                       |
|           |     |  |                           |

## All - Assessment Task 2: Review of case study investigation management

| GOAL:     | From a set text, learners will identify investigation management issues raised and identify how such behaviours might be manifested in a cyber investigation; what risks they might pose to the investigation; and what an investigation manager might do to prevent or resolve such problems. |                           |  |  |  |
|-----------|--|---------------------------|--|--|--|
| PRODUCT:  | Written Piece  |                           |  |  |  |
| FORMAT:   | Written paper  |                           |  |  |  |
| CRITERIA: | No.  | Learning Outcome assessed |  |  |  |
|           | Measured against the rubric published for this assessment on Blackboard which will be<br>based on the learning outcomes.   | 1245                      |  |  |  |
|           |  |                           |  |  |  |

## All - Assessment Task 3: Review of investigation management circumstances and needs

| GOAL:     | For this task you are required to review the circumstances outlined in this complex investigation case-study scenario to answer the following questions:  • what investigation management issues arise from these circumstances;  • what are the potential sources of evidence and what investigation skills, technologies, methods, and protocols should be employed to secure this evidence; and  • what systemic cybersecurity problems (if any) have been disclosed by these circumstances, and how should these be addressed? |      |  |  |  |
|-----------|--|------|--|--|--|
| PRODUCT:  | Written Piece  |      |  |  |  |
| FORMAT:   | This assessment comprises a 4,000-word written paper reviewing a case-study scenario.  |      |  |  |  |
| CRITERIA: | No. Learning Outcome assessed  |      |  |  |  |
|           | 1 Applies investigation management problem-solving to a case-study scenario  | 1245 |  |  |  |
|           |  |      |  |  |  |

# 7. Directed study hours

A 12-unit course will have total of 150 learning hours which will include directed study hours (including online if required), self-directed learning and completion of assessable tasks. Student workload is calculated at 12.5 learning hours per one unit.

## 7.1. Schedule

| PERIOD AND TOPIC | ACTIVITIES  |
|------------------|---|
| n/a              | The planned schedule for this course comprises three modules: 1-the problem; 2 – the profession; 3 – the processes. |
|                  | MODULE 1 – The Problem  |
|                  | Week 1 – What should be investigated (cybercriminology)?  |
|                  | Week 2 – What should be investigated (strategic practice)?  |
|                  | MODULE 2 – The Profession   |
|                  | Week 3 – Is investigation a profession?   |
|                  | Assessment 1 – quiz & short answer question   |
|                  | Week 4 – What ethical issues are engaged during an  |
|                  | investigation?  |
|                  | Week 5 – How can investigation be managed ethically?  |
|                  | Week 6 – Assessment 2 – written piece   |
|                  | MODULE 3 – The Processes  |
|                  | Week 7 – How are risks and resources managed?   |
|                  | Week 8 – How are investigation decisions made?  |
|                  | Week 9 - What legal frameworks are engaged by investigation management?   |
|                  | Week 10 – What happens when an investigation reacehs the border?  |
|                  | Week 11 – How are internal investigations managed?  |
|                  | Week 12 – Course review   |
|                  | Week 13 – Assessment 3 written piece based on investigation scenario  |

#### 8. What resources do I need to undertake this course?

Please note: Course information, including specific information of recommended readings, learning activities, resources, weekly readings, etc. are available on the course Canvas site—Please log in as soon as possible.

## 8.1. Prescribed text(s) or course reader

Please note that you need to have regular access to the resource(s) listed below. Resources may be required or recommended.

| REQUIRED?   | AUTHOR  | YEAR | TITLE                                   | EDITION | PUBLISHER           |
|-------------|---|------|---|---------|---------------------|
| Recommended | Thomas HOLT, Adam<br>BOSSLER & Kathryn<br>SIEGFRIED-SPELLAR | 2018 | Cybercrime and Digital Forensics        | n/a     | Routledge           |
| Recommended | Graeme Edwards  | 2019 | Cybercrime Investigators Handbook       | n/a     | John Wiley & Sons   |
| Recommended | Peter Stelfox   | 2009 | Criminal Investigation                  | n/a     | Willan Pub          |
| Recommended | Robert Moore  | 2010 | Cybercrime                              | n/a     | Anderson Publishing |
| Recommended | Brett Shavers   | 2013 | Placing the Suspect Behind the Keyboard | n/a     | Syngress Press      |

#### 8.2. Specific requirements

This is an online course, therefore access to a computer and an a strong and stable internet connection is essential. To participate in the synchronous online tutorial classes conducted via video conference, it will be necessary for your computer to be equipped with an in-built or peripheral webcam and microphone

# 9. How are risks managed in this course?

Health and safety risks for this course have been assessed as low. It is your responsibility to review course material, search online, discuss with lecturers and peers and understand the health and safety risks associated with your specific course of study and to familiarise yourself with the University's general health and safety principles by reviewing the online induction training for students, and following the instructions of the University staff.

#### 10. What administrative information is relevant to this course?

#### 10.1. Assessment: Academic Integrity

Academic integrity is the ethical standard of university participation. It ensures that students graduate as a result of proving they are competent in their discipline. This is integral in maintaining the value of academic qualifications. Each industry has expectations and standards of the skills and knowledge within that discipline and these are reflected in assessment.

Academic integrity means that you do not engage in any activity that is considered to be academic fraud; including plagiarism, collusion or outsourcing any part of any assessment item to any other person. You are expected to be honest and ethical by completing all work yourself and indicating in your work which ideas and information were developed by you and which were taken from others. You cannot provide your assessment work to others. You are also expected to provide evidence of wide and critical reading, usually by using appropriate academic references.

In order to minimise incidents of academic fraud, this course may require that some of its assessment tasks, when submitted to Canvas, are electronically checked through Turnitin. This software allows for text comparisons to be made between your submitted assessment item and all other work to which Turnitin has access.

#### 10.2. Assessment: Additional Requirements

Your eligibility for supplementary assessment in a course is dependent of the following conditions applying:

The final mark is in the percentage range 47% to 49.4%

The course is graded using the Standard Grading scale

You have not failed an assessment task in the course due to academic misconduct.

#### 10.3. Assessment: Submission penalties

Late submission of assessment tasks may be penalised at the following maximum rate:

- 5% (of the assessment task's identified value) per day for the first two days from the date identified as the due date for the assessment task
- 10% (of the assessment task's identified value) for the third day 20% (of the assessment task's identified value) for the fourth day and subsequent days up to and including seven days from the date identified as the due date for the assessment task.
- A result of zero is awarded for an assessment task submitted after seven days from the date identified as the due date for the assessment task. Weekdays and weekends are included in the calculation of days late. To request an extension you must contact your course coordinator to negotiate an outcome.

#### 10.4. SafeUniSC

UniSC is committed to a culture of respect and providing a safe and supportive environment for all members of our community. For immediate assistance on campus contact SafeUniSC by phone: <a href="mailto:0754301168">0754301168</a> or using the <a href="mailto:SafeUniSC">SafeZone</a> app. For general enquires contact the SafeUniSC team by phone <a href="mailto:0754563864">0754563864</a> or email <a href="mailto:safe@usc.edu.au">safe@usc.edu.au</a>.

The SafeUniSC Specialist Service is a Student Wellbeing service that provides free and confidential support to students who may have experienced or observed behaviour that could cause fear, offence or trauma. To contact the service call <u>07 5430 1226</u> or email <u>studentwellbeing@usc.edu.au</u>.

#### 10.5. Study help

For help with course-specific advice, for example what information to include in your assessment, you should first contact your tutor, then your course coordinator, if needed.

If you require additional assistance, the Learning Advisers are trained professionals who are ready to help you develop a wide range of academic skills. Visit the <u>Learning Advisers</u> web page for more information, or contact Student Central for further assistance: +61 7 5430 2890 or <u>studentcentral@usc.edu.au</u>.

#### 10.6. Wellbeing Services

Student Wellbeing provide free and confidential counselling on a wide range of personal, academic, social and psychological matters, to foster positive mental health and wellbeing for your academic success.

To book a confidential appointment go to Student Hub, email studentwellbeing@usc.edu.au or call 07 5430 1226.

#### 10.7. AccessAbility Services

Ability Advisers ensure equal access to all aspects of university life. If your studies are affected by a disability, learning disorder mental health issue, injury or illness, or you are a primary carer for someone with a disability or who is considered frail and aged, AccessAbility Services can provide access to appropriate reasonable adjustments and practical advice about the support and facilities available to you throughout the University.

To book a confidential appointment go to Student Hub, email AccessAbility@usc.edu.au or call 07 5430 2890.

#### 10.8. Links to relevant University policy and procedures

For more information on Academic Learning & Teaching categories including:

- Assessment: Courses and Coursework Programs
- · Review of Assessment and Final Grades
- Supplementary Assessment
- Central Examinations
- Deferred Examinations
- Student Conduct
- Students with a Disability

For more information, visit https://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching

#### 10.9. Student Charter

UniSC is committed to excellence in teaching, research and engagement in an environment that is inclusive, inspiring, safe and respectful. The <u>Student Charter</u> sets out what students can expect from the University, and what in turn is expected of students, to achieve these outcomes.

## 10.10.General Enquiries

#### In person:

- UniSC Sunshine Coast Student Central, Ground Floor, Building C, 90 Sippy Downs Drive, Sippy Downs
- · UniSC Moreton Bay Service Centre, Ground Floor, Foundation Building, Gympie Road, Petrie
- UniSC SouthBank Student Central, Building A4 (SW1), 52 Merivale Street, South Brisbane
- o UniSC Gympie Student Central, 71 Cartwright Road, Gympie
- UniSC Fraser Coast Student Central, Student Central, Building A, 161 Old Maryborough Rd, Hervey Bay
- UniSC Caboolture Student Central, Level 1 Building J, Cnr Manley and Tallon Street, Caboolture

Tel: +61 7 5430 2890

Email: studentcentral@usc.edu.au