

# **PICT849**

# **Cyber Policing and Intelligence**

S2 External 2017

Department of Security Studies and Criminology

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#### Disclaimer

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### **General Information**

Unit convenor and teaching staff

Allon Uhlmann

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Credit points

4

#### Prerequisites

Admission to MCrim or MPICT or MCPICT or GradDipPICT or GradDipCPICT or PGDipPICT or GradCertCPICT or MPICTMIntSecSt or MCPICTMIntSecSt or MIntSecStud or GradDipIntSecStud or GradCertIntSecStud

Corequisites

Co-badged status

#### Unit description

The results of a cyberattack can be disastrous, ranging from physical destruction to economic chaos. Therefore, organisations must develop cyber threat intelligence that enables a more proactive, over-the-horizon threat awareness posture. In this unit students learn how cyber intelligence can be used to fight cybercrime and strengthen an organisation's security posture against a range of adversaries and attack vectors. This includes understanding the role of cyber intelligence; intelligence tactics, techniques and processes; as well as the intelligence product and evaluation, analysis and interpretation of cyber intelligence. Cyber policing will be examined from an intelligence-led policing perspective. As part of this we look at cybercrime, jurisdictions and extradition, information sharing, and collaboration and cyber policing challenges. During the unit, students will use a commercial software platform to examine the application of intelligence analysis processes and procedures.

# 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:

Critique contemporary literature relating to the concepts of cyber intelligence and policing Demonstrate higher order communication skills including the ability to formulate sustained, persuasive and original written and oral arguments Model academic research skills, particularly the ability to select sources appropriately to integrate knowledge from diverse sources, to critically evaluate its significance and relevance, synthesise material and present finding logically, rationally and lucidly Evaluate how the intelligence function fits within the dynamic national and internal cyber security context

Critically analyse a case study, demonstrating professional judgment and assessment.

### Assessment Tasks

Name	Weighting	Hurdle	Due
Research essay	50%	No	TBC
Intelligence product/report	25%	No	TBC
Participation/engagement	25%	No	Ongoing

# Research essay

Due: TBC

Weighting: 50%

See unit iLearn site for details.

On successful completion you will be able to:

- Critique contemporary literature relating to the concepts of cyber intelligence and policing
- Demonstrate higher order communication skills including the ability to formulate sustained, persuasive and original written and oral arguments
- Model academic research skills, particularly the ability to select sources appropriately to integrate knowledge from diverse sources, to critically evaluate its significance and relevance, synthesise material and present finding logically, rationally and lucidly
- Evaluate how the intelligence function fits within the dynamic national and internal cyber security context
- Critically analyse a case study, demonstrating professional judgment and assessment.

## Intelligence product/report

Due: TBC

Weighting: 25%

See unit iLearn site for details.

On successful completion you will be able to:

- · Critique contemporary literature relating to the concepts of cyber intelligence and policing
- Demonstrate higher order communication skills including the ability to formulate sustained, persuasive and original written and oral arguments
- Model academic research skills, particularly the ability to select sources appropriately to integrate knowledge from diverse sources, to critically evaluate its significance and relevance, synthesise material and present finding logically, rationally and lucidly
- Evaluate how the intelligence function fits within the dynamic national and internal cyber security context
- Critically analyse a case study, demonstrating professional judgment and assessment.

## Participation/engagement

Due: **Ongoing** Weighting: **25%** 

See unit iLearn page for details.

On successful completion you will be able to:

- Critique contemporary literature relating to the concepts of cyber intelligence and policing
- Demonstrate higher order communication skills including the ability to formulate sustained, persuasive and original written and oral arguments
- Model academic research skills, particularly the ability to select sources appropriately to integrate knowledge from diverse sources, to critically evaluate its significance and relevance, synthesise material and present finding logically, rationally and lucidly
- Evaluate how the intelligence function fits within the dynamic national and internal cyber security context
- Critically analyse a case study, demonstrating professional judgment and assessment.

# **Delivery and Resources**

**DELIVERY AND RESOURCES** 

#### UNIT REQUIREMENTS AND EXPECTATIONS

- You should spend an average of 12 hours per week on this unit. This includes listening
  to lectures prior to seminar or tutorial, reading weekly required materials as detailed in
  iLearn, participating in iLearn discussion forums and preparing assessments.
- Internal students are expected to attend all seminar or tutorial sessions, and external students are expected to make significant contributions to on-line activities.
- In most cases students are required to attempt and submit all major assessment tasks in order to pass the unit.

#### REQUIRED READINGS

The citations for all the required readings for this unit are available to enrolled students
through the unit iLearn site, and at Macquarie University's library site. Electronic copies
of required readings may be accessed through the library or will be made available by
other means.

#### TECHNOLOGY USED AND REQUIRED

- Computer and internet access are essential for this unit. Basic computer skills and skills in word processing are also a requirement. \* This unit has an online presence. Login is via: https://ilearn.mq.edu.au/
- Students are required to have regular access to a computer and the internet. Mobile devices alone are not sufficient.
- Information about IT used at Macquarie University is available at http://students.mg.edu.au/it services/

#### SUBMITTING ASSESSMENT TASKS

- All text-based assessment tasks are to be submitted, marked and returned electronically.
   This will only happen through the unit iLearn site.
- Assessment tasks must be submitted as a MS word document by the due date.
- Most assessment tasks will be subject to a 'Turnitin' review as an automatic part of the submission process.
- The granting of extensions is subject to the university's Disruptions Policy. Extensions
  will not in normal circumstances be granted by unit conveners or tutors, but must be
  lodged through Disruption to Study: http://www.students.mq.edu.au/student\_admin/
  manage\_your\_study\_program/disruption\_to\_studies/.

#### LATE SUBMISSION OF ASSESSMENT TASKS

- If an assignment is submitted late, 5% of the available mark will be deducted for each day (including weekends) the paper is late.
- For example, if a paper is worth 20 marks, 1 mark will be deducted from the grade given for each day that it is late (i.e. a student given 15/20 who submitted 4 days late will lose 4 marks = 11/20).
- The same principle applies if an extension is granted and the assignment is submitted later than the amended date.

#### WORD LIMITS FOR ASSESSMENT TASKS

· Stated word limits include footnotes and footnoted references, but not bibliography, or

title page.

- Word limits can generally deviate by 10% either over or under the stated figure.
- If the number of words exceeds the limit by more than 10%, then penalties will apply. These penalties are 5% of the awarded mark for every 100 words over the word limit. If a paper is 300 words over, for instance, it will lose 3 x 5% = 15% of the total mark awarded for the assignment. This percentage is taken off the total mark, i.e. if a paper was graded at a credit (65%) and was 300 words over, it would be reduced by 15 marks to a pass (50%).
- The application of this penalty is at the discretion of the course convener.

#### REASSESSMENT OF ASSIGNMENTS DURING THE SEMESTER

- Macquarie University operates a Grade Appeal Policy in cases where students feel their work was graded inappropriately: http://www.mq.edu.au/policy/docs/gradeappeal/ policy.html
- In accordance with the Grade Appeal Policy, individual works are not subject to regrading.

#### STAFF AVAILABILITY

- Department staff will endeavour to answer student enquiries in a timely manner.
   However, emails or iLearn messages will not usually be answered over the weekend or public holiday period.
- Students are encouraged to read the Unit Guide and look at instructions posted on the iLearn site before sending email requests to staff.

## **Unit Schedule**

- Week 1 Introduction to cyber policing and intelligence
- Week 2 Knowing ourselves and knowing our enemies
- Week 3 Cyber threat intelligence and counterintelligence
- Week 4 Strategic, operational and tactical cyber intelligence
- Week 5 The intelligence cycle
- Week 6 Sources of intelligence
- Week 7 Investigation techniques
- Week 8 The intelligence product and tools
- Week 9 Cybercrime theories
- Week 10 Policing models

Week 11 - Information sharing, collaboration and privacy

Week 12 - Cybercrime, jurisdiction and extradition

Week 13 - Unit review

### **Policies and Procedures**

Macquarie University policies and procedures are accessible from Policy Central. Students should be aware of the following policies in particular with regard to Learning and Teaching:

Academic Honesty Policy http://mq.edu.au/policy/docs/academic\_honesty/policy.html

Assessment Policy http://mq.edu.au/policy/docs/assessment/policy\_2016.html

Grade Appeal Policy http://mq.edu.au/policy/docs/gradeappeal/policy.html

Complaint Management Procedure for Students and Members of the Public <a href="http://www.mq.edu.au/policy/docs/complaint\_management/procedure.html">http://www.mq.edu.au/policy/docs/complaint\_management/procedure.html</a>

Disruption to Studies Policy (in effect until Dec 4th, 2017): <a href="http://www.mq.edu.au/policy/docs/disruption\_studies/policy.html">http://www.mq.edu.au/policy/docs/disruption\_studies/policy.html</a>

Special Consideration Policy (in effect from Dec 4th, 2017): <a href="https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policies/special-consideration">https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policies/special-consideration</a>

In addition, a number of other policies can be found in the <u>Learning and Teaching Category</u> of Policy Central.

#### **Student Code of Conduct**

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/support/student\_conduct/

#### Results

Results shown in *iLearn*, 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 <a href="extraction-color: blue} eStudent</a>. For more information visit <a href="extraction-color: blue} ask.m</a> <a href="equation-color: blue} e...</a>

### Student Support

Macquarie University provides a range of support services for students. For details, visit <a href="http://students.mq.edu.au/support/">http://students.mq.edu.au/support/</a>

### **Learning Skills**

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to improve your marks and take control of your study.

- Workshops
- StudyWise
- Academic Integrity Module for Students

· Ask a Learning Adviser

## Student Services and Support

Students with a disability are encouraged to contact the <u>Disability Service</u> who can provide appropriate help with any issues that arise during their studies.

## Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

## IT Help

For help with University computer systems and technology, visit <a href="http://www.mq.edu.au/about\_us/">http://www.mq.edu.au/about\_us/</a> offices\_and\_units/information\_technology/help/.

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

# **Graduate Capabilities**

# PG - Capable of Professional and Personal Judgment and Initiative

Our postgraduates will demonstrate a high standard of discernment and common sense in their professional and personal judgment. They will have the ability to make informed choices and decisions that reflect both the nature of their professional work and their personal perspectives.

This graduate capability is supported by:

### **Learning outcomes**

- · Critique contemporary literature relating to the concepts of cyber intelligence and policing
- Demonstrate higher order communication skills including the ability to formulate sustained, persuasive and original written and oral arguments
- Model academic research skills, particularly the ability to select sources appropriately to integrate knowledge from diverse sources, to critically evaluate its significance and relevance, synthesise material and present finding logically, rationally and lucidly
- Evaluate how the intelligence function fits within the dynamic national and internal cyber security context
- Critically analyse a case study, demonstrating professional judgment and assessment.

#### Assessment tasks

- Research essay
- Intelligence product/report
- Participation/engagement

## PG - Discipline Knowledge and Skills

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

### Learning outcomes

- Critique contemporary literature relating to the concepts of cyber intelligence and policing
- Demonstrate higher order communication skills including the ability to formulate sustained, persuasive and original written and oral arguments
- Model academic research skills, particularly the ability to select sources appropriately to integrate knowledge from diverse sources, to critically evaluate its significance and relevance, synthesise material and present finding logically, rationally and lucidly
- Evaluate how the intelligence function fits within the dynamic national and internal cyber security context
- Critically analyse a case study, demonstrating professional judgment and assessment.

### Assessment tasks

- · Research essay
- Intelligence product/report
- Participation/engagement

## PG - Critical, Analytical and Integrative Thinking

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:

## **Learning outcomes**

- Critique contemporary literature relating to the concepts of cyber intelligence and policing
- Demonstrate higher order communication skills including the ability to formulate sustained, persuasive and original written and oral arguments
- Model academic research skills, particularly the ability to select sources appropriately to integrate knowledge from diverse sources, to critically evaluate its significance and relevance, synthesise material and present finding logically, rationally and lucidly
- Evaluate how the intelligence function fits within the dynamic national and internal cyber

security context

· Critically analyse a case study, demonstrating professional judgment and assessment.

#### Assessment tasks

- · Research essay
- Intelligence product/report
- · Participation/engagement

## PG - Research and Problem Solving Capability

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:

### Learning outcomes

- · Critique contemporary literature relating to the concepts of cyber intelligence and policing
- Demonstrate higher order communication skills including the ability to formulate sustained, persuasive and original written and oral arguments
- Model academic research skills, particularly the ability to select sources appropriately to integrate knowledge from diverse sources, to critically evaluate its significance and relevance, synthesise material and present finding logically, rationally and lucidly
- Critically analyse a case study, demonstrating professional judgment and assessment.

#### Assessment tasks

- Research essay
- Intelligence product/report
- Participation/engagement

### PG - Effective Communication

Our postgraduates will be able to communicate effectively and convey their views to different social, cultural, and professional audiences. They will be able to use a variety of technologically supported media to communicate with empathy using a range of written, spoken or visual formats.

This graduate capability is supported by:

## Learning outcomes

- Critique contemporary literature relating to the concepts of cyber intelligence and policing
- Demonstrate higher order communication skills including the ability to formulate

- sustained, persuasive and original written and oral arguments
- Model academic research skills, particularly the ability to select sources appropriately to integrate knowledge from diverse sources, to critically evaluate its significance and relevance, synthesise material and present finding logically, rationally and lucidly

#### **Assessment tasks**

- Research essay
- Intelligence product/report
- Participation/engagement

# PG - Engaged and Responsible, Active and Ethical Citizens

Our postgraduates will be ethically aware and capable of confident transformative action in relation to their professional responsibilities and the wider community. They will have a sense of connectedness with others and country and have a sense of mutual obligation. They will be able to appreciate the impact of their professional roles for social justice and inclusion related to national and global issues

This graduate capability is supported by:

### Learning outcomes

- · Critique contemporary literature relating to the concepts of cyber intelligence and policing
- Model academic research skills, particularly the ability to select sources appropriately to integrate knowledge from diverse sources, to critically evaluate its significance and relevance, synthesise material and present finding logically, rationally and lucidly

#### Assessment tasks

- Research essay
- Intelligence product/report
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