

# Bachelor of Cyber Security

## Structure

3 years FTE 144 UoC

### Core 60 UoC

COMP1511	Programming Fundamentals	Existing
COMP1521	Computer Systems Fundamentals	Existing
COMP1441	Foundations of Security (simplified on 6441)	Based on Existing
MATH1081	Discrete Mathematics	Existing
COMP2521	Data Structures and Algorithms	Existing
COMP1???	Human Centric Security	New
COMP1841	Cyber Security Workshop 1 (simplified COMP6841)	Based on Existing
COMP2841	Cyber Security Workshop 2 – Pen testing	New
COMP3841	Workshop 3 - Professional Capstone – red/blue teaming	New
COMP4920	Professional Issues and Ethics in Information Technology (or equivalent)	Existing

### PLUS General Education 12 UoC

Any two GE subjects taken outside the Faculty

### PLUS Cyber Electives 36 UoC

At least 36 UoC drawn from the cyber electives (list below)

Subject to

#### COMP Requirement

Must take at least 36 UoC in COMP courses at 3000 level or above

### Cyber Electives

- COMP6??? - Cloud Security
- COMP6443 - Web Application Security (or Extended/6843)
- COMP6447 - System and Software Security Assessment
- COMP6??? – Hardware Security - **new**
- COMP6445 – Digital Forensics (or Extended/6845)
- COMP6453 – Applied Cryptography - **new**
- COMP2??? – Privacy Engineering - **new**
- COMP2??? – Introduction to Cryptography - **new**
- COMP6131 - Software Security Analysis - **new**
- MATH3411 – Information, Codes and Ciphers
- COMP9417 – Machine Learning and data mining
- COMP9444 – Neural Networks and Deep Learning

- COMP4337 – Network Security (currently Securing Fixed and Wireless Networks)
- COMP9418 - Advanced Topics in Statistical Machine Learning
- LAWS8398 – Introduction to Law and Policy for Cyber Security
- PSYC1001 – Psychology 1A
- PSYC1011 – Psychology 1B
- SOSS1000 – Policy and Society
- PSYC2061 – Social and Developmental Psychology

### **Named Majors (specialisations)**

Students can optionally take certain combinations of courses as a named specialisation.

Students may qualify for more than one specialisation. If students do not qualify for any specialisations they are awarded Bachelor of Cyber Security.

### **Bachelor of Cyber Security (Security Engineering)**

4 courses from:

- COMP6??? - Cloud Security
- COMP6443 - Web Application Security (or Extended/6843)
- COMP6447 - System and Software Security Assessment
- COMP6??? – Hardware Security
- COMP6445 – Digital Forensics (or Extended/6845)

### **Bachelor of Cyber Security (Information Security)**

4 courses from:

- COMP6453 – Applied Cryptography
- COMP2??? – Privacy Engineering
- COMP6131 – Software Security Analysis
- MATH3411 – Information, Codes and Ciphers

### **Bachelor of Cyber Security (AI and Data)**

4 courses from:

- COMP4337 – Network Security
- COMP9417 – Machine Learning and data mining
- COMP3411 - Artificial Intelligence
- COMP9444 – Neural Networks and Deep Learning
- COMP9418 - Advanced Topics in Statistical Machine Learning

### **Bachelor of Cyber Security (Human Factors)**

4 courses from:

- LAWS8398 – Introduction to Law and Policy for Cyber Security
- PSYC1001 – Psychology 1A
- PSYC1011 – Psychology 1B
- SOSS1000 – Policy and Society
- PSYC2061 – Social and Developmental Psychology

# **Bachelor of Cyber Security (Hons)**

## **Structure**

4 years FTE 192 UoC

## **Core 60 UoC**

As for 3 year degree

## **PLUS General Education (12 UoC)**

Any two GE subjects taken outside the Faculty

## **PLUS Cyber Electives (54 UoC)**

At least 54 UoC drawn from the cyber electives (list below)

## **PLUS 3 Cyber Hons Courses (18 UoC)**

Subject to

### **COMP Requirement**

Must take at least 54 UoC in COMP courses at 3000 level or above

### **ADVANCED Requirement**

Must take at least 30 UoC in courses at 4000 or above.

## **POSTGRAD Indicative Structure**

### **Graduate Certificate in Cyber Security (24 UoC)**

COMP9??? – Foundations of Cyber Security (  
COMP9??? – Principles of Security Engineering  
LAWS8398 – Introduction to Law and Policy for Cyber Security  
COMP1841– Cyber Security Workshop (need to rebadge?)

### **Graduate Diploma in Cyber Security (48 UoC)**

#### **Certificate courses (24 UoC)**

As for the certificate

**PLUS**

#### **Elective (48 UoC)**

4 courses from the Security Elective list  
(can these include 1000 or 2000 level courses?)

### **Masters in Cyber Security (96 UoC)**

#### **Diploma Courses (48 UoC)**

As for the Diploma

**PLUS**

#### **COMP Electives (24 UoC)**

4 COMP Courses (*expect these to be RPL-ed for students with cognate undergrad degree*)

**PLUS**

#### **Project / Capstone / Research (18 UoC)**

**PLUS**

#### **Free Elective (6 UoC)**

**SUBJECT TO**

#### **Advanced Disciplinary Content**

Cyber Electives at 4000 level and above of at least 48 UoC