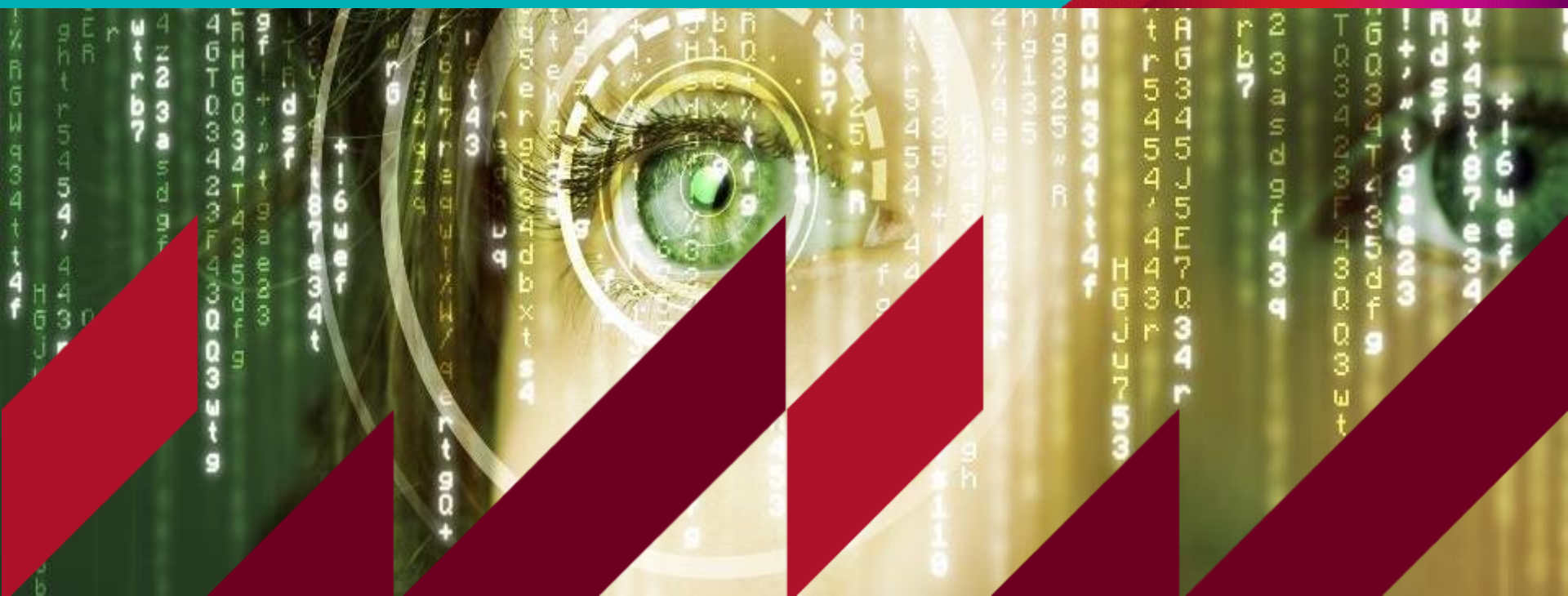


# Optus Macquarie University Cyber Security Hub

A/Prof Christophe Doche – Executive Director



## Our Vision

**Support Australia's growth in a complex world via education and research excellence in cyber security**

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**Support Australia's growth in a complex world via education and research excellence in cyber security**

**Concretely, we aim at**

- 1. Enhancing cyber resilience**
- 2. Facilitating innovation in the cyberspace**
- 3. Translating complex information into simple terms**

## In a Nutshell

- ✓ \$10 million joint investment with Optus
- ✓ Network of academics, business and government leaders
- ✓ Tackling cyber security across different fields of expertise



**IT & Systems  
Security**



**Business,  
Finance & Risk**

**IT & Systems  
Security**

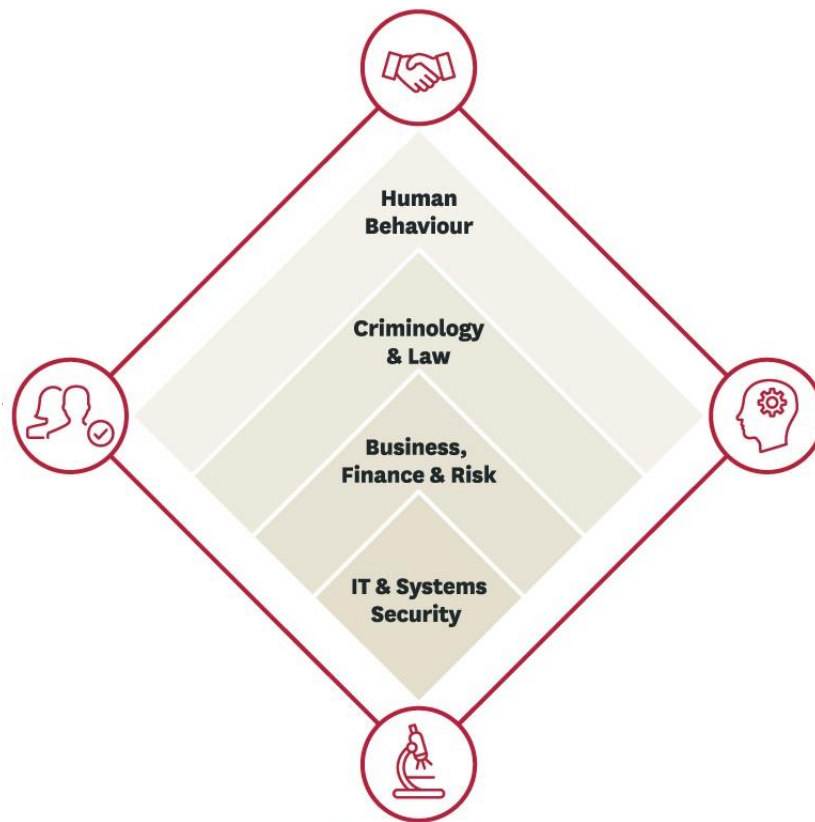


**Criminology  
& Law**

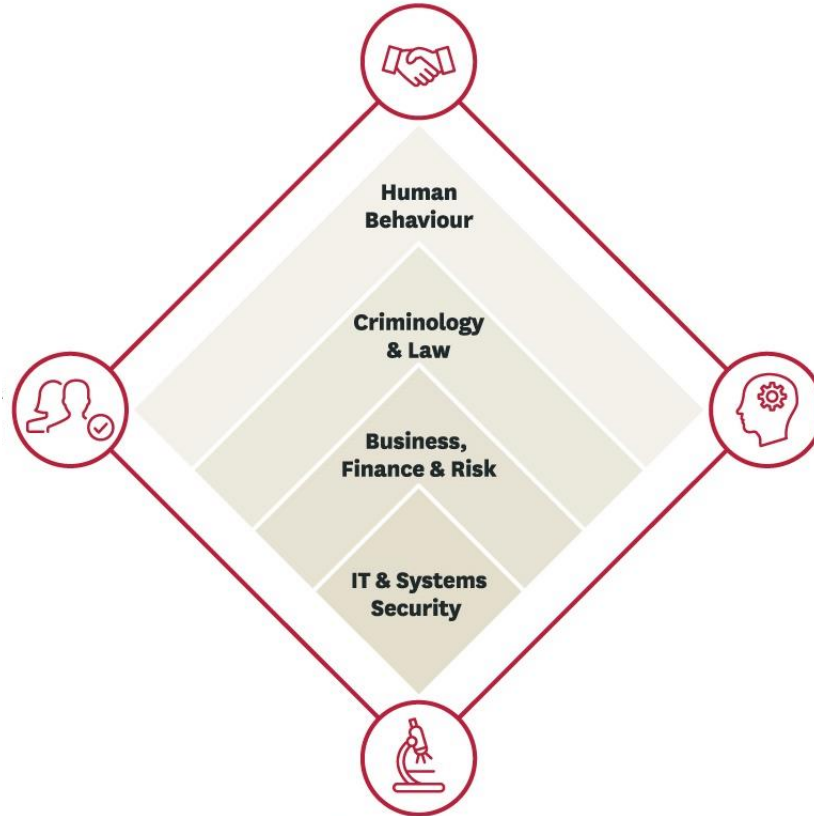
**Business,  
Finance & Risk**

**IT & Systems  
Security**





# Cross-sector Collaboration



# Cross-sector Collaboration



**Human  
Behaviour**

**Criminology  
& Law**

**Business,  
Finance & Risk**

**IT & Systems  
Security**

**Thought  
Leadership**



**Cross-sector  
Collaboration**



**Human  
Behaviour**

**Criminology  
& Law**

**Business,  
Finance & Risk**

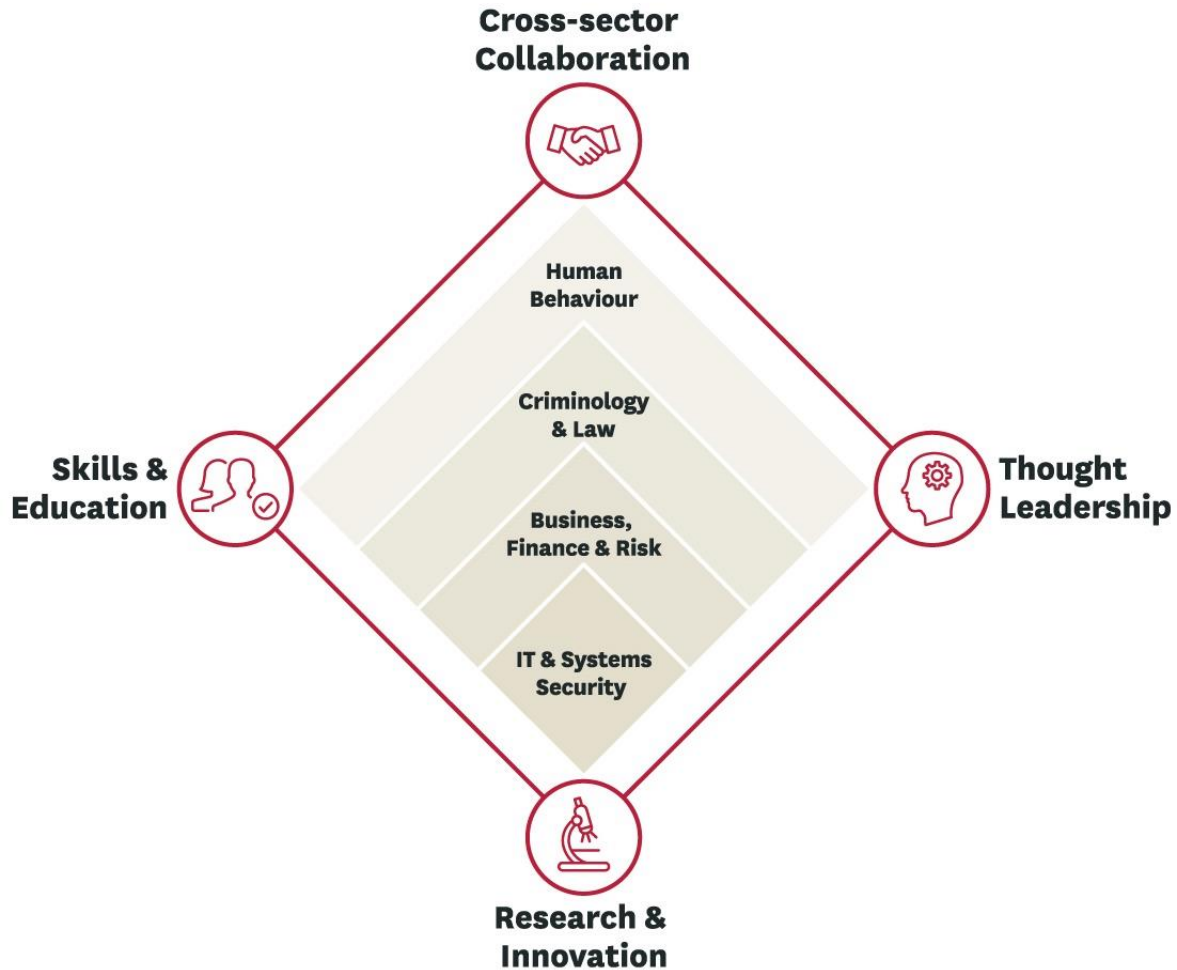
**IT & Systems  
Security**



**Thought  
Leadership**



**Research &  
Innovation**



## Cross-sector Collaboration



Australian Government

Department of Foreign Affairs and Trade



## Partnership with Data61



✓ Joint Strategy and Research Program

Project on privacy preserving data-sharing technologies worth more than \$1.6m

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- ✓ Joint Strategy and Research Program

Project on privacy preserving data-sharing technologies worth more than \$1.6m

- ✓ Joint Appointments

Prof Dali Kaafar, Scientific Director of the Cyber Security Hub and Group Leader at Data61

Three new academic positions in 2018

## Partnership with Risk Frontiers



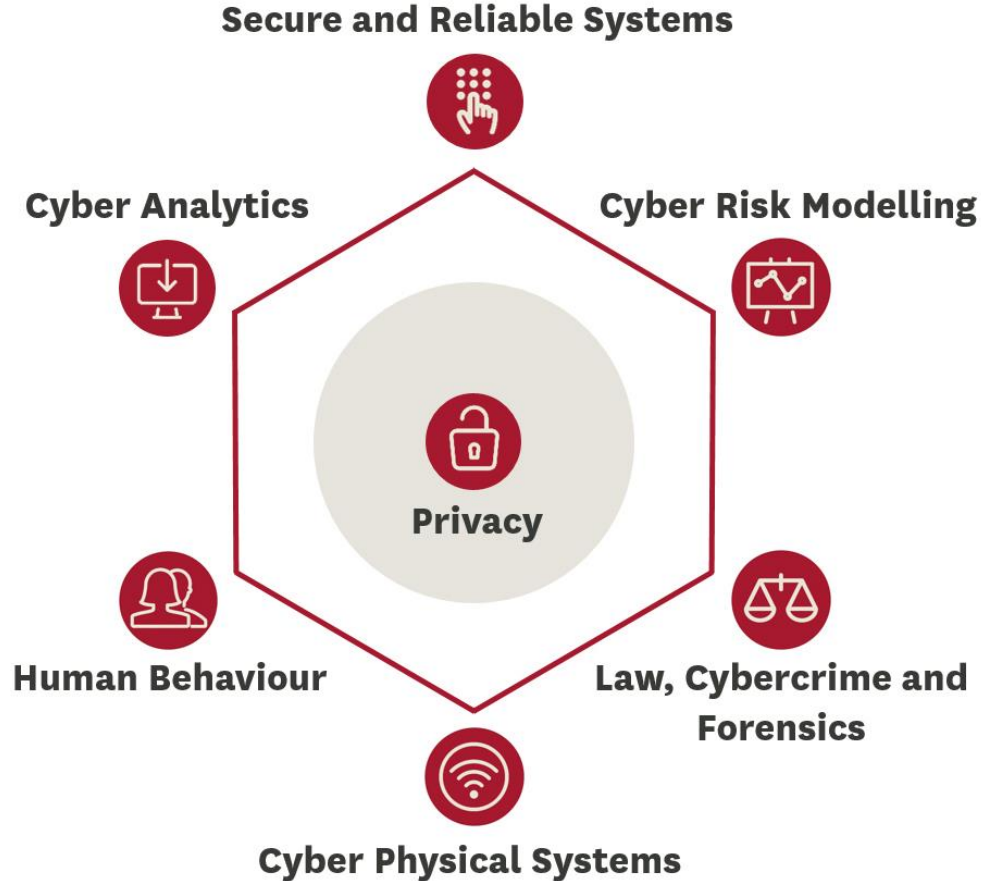
- ✓ Risk Management and Catastrophe Modelling  
Specialised in developing models addressing natural disasters for the insurance sector

## Partnership with Risk Frontiers



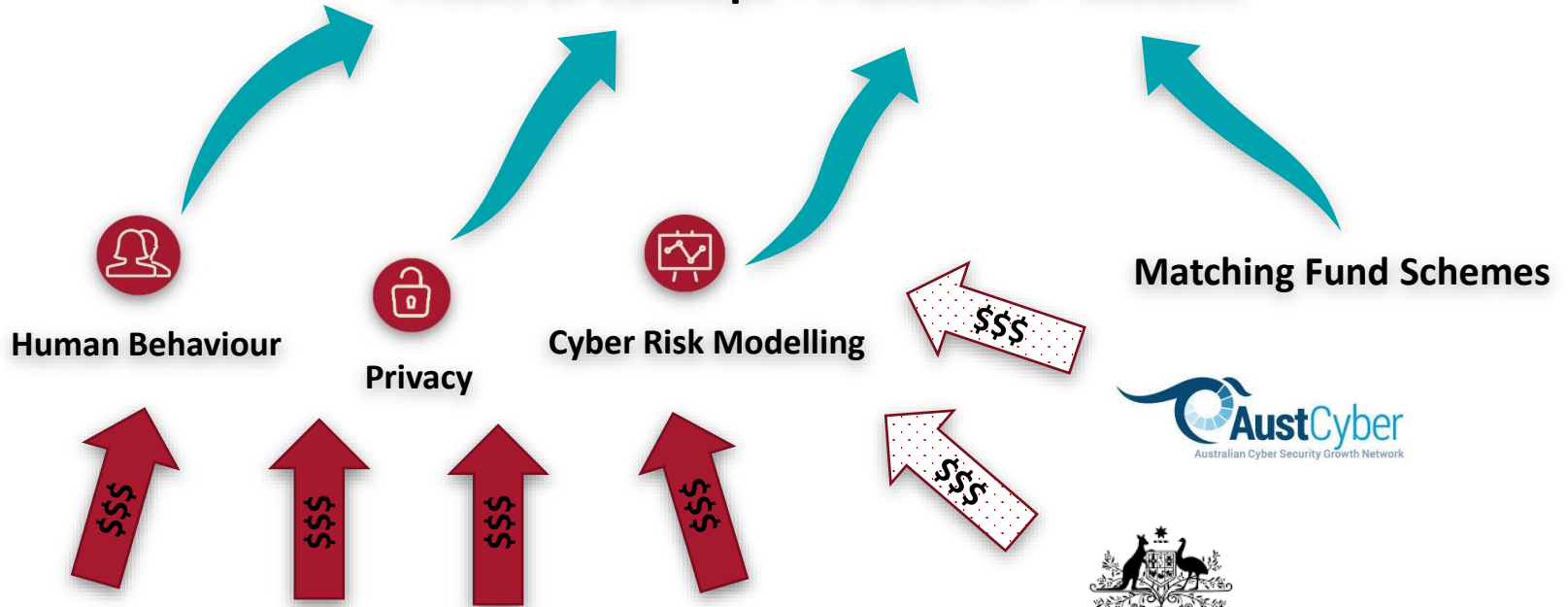
- ✓ Risk Management and Catastrophe Modelling
  - Specialised in developing models addressing natural disasters for the insurance sector
- ✓ Cyber Risk Modelling
  - Research project worth \$400k under way to model the impact of several types of attacks

# Research Themes



# Innovation Ecosystem

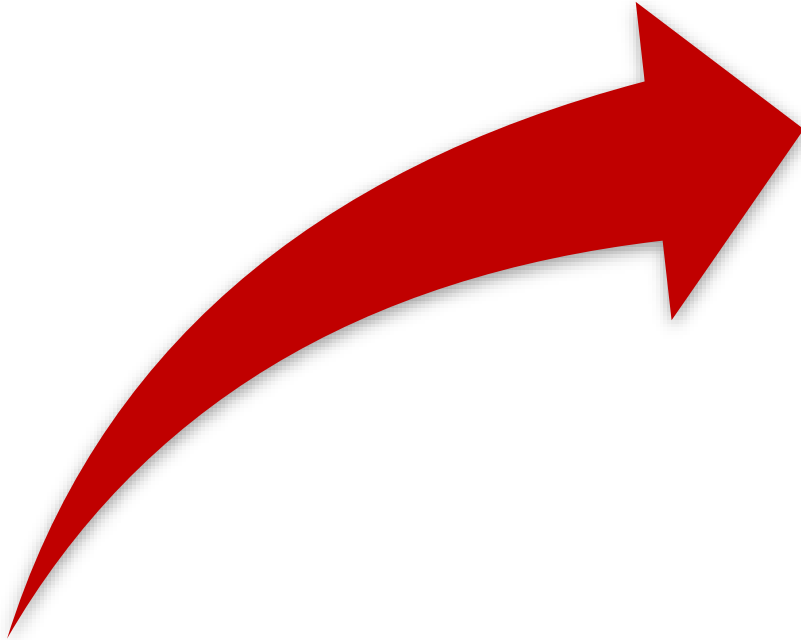
## Proofs of Concept – Platforms – Models



**Australian Government**  
**Australian Research Council**

## Skills & Education

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## Skills & Education



Schools

## Skills & Education



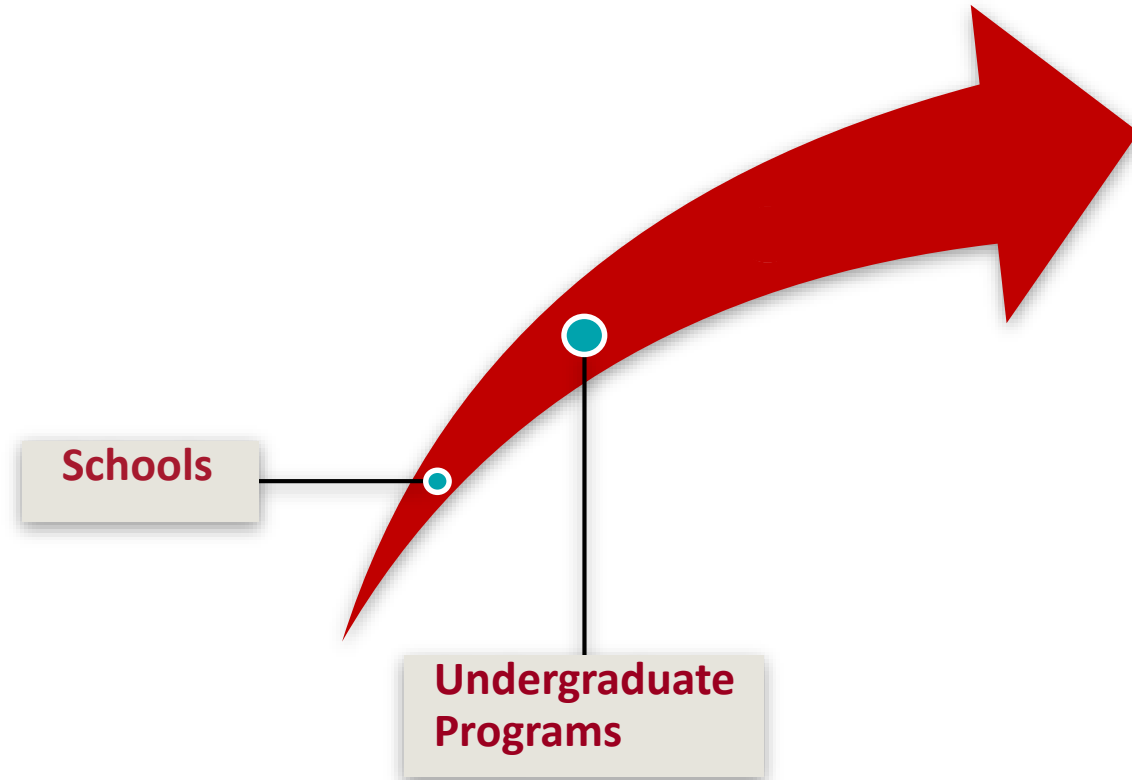
Schools

### Schools

Outreach program to high school students and teachers to create a pipeline of graduates

- ✓ Cyber Challenge
- ✓ LifeJourney

## Skills & Education



## Skills & Education



Schools

Undergraduate  
Programs

### Undergraduate Programs

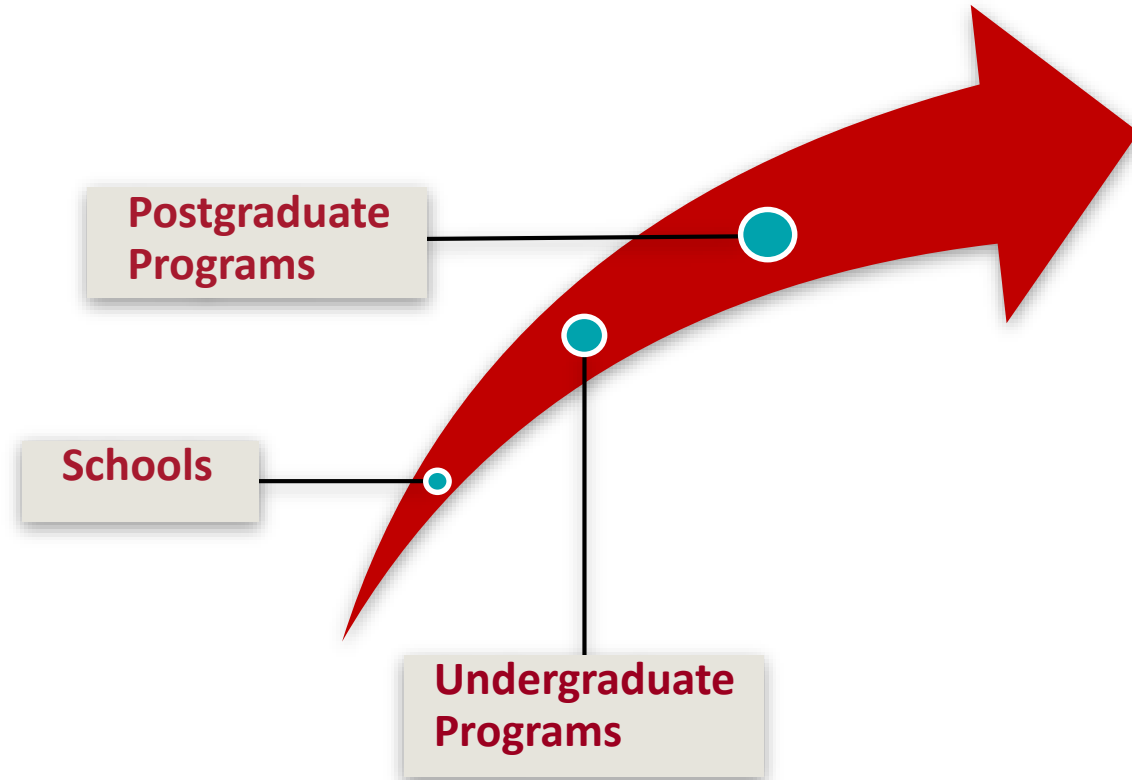
New programs in Cyber Security

- ✓ Major (2017)
- ✓ Bachelor (2020)

Scholarships

Industry work-experience

## Skills & Education



## Skills & Education

### Postgraduate Programs

- ✓ Master of Cyber Security
- ✓ Master of Research
- ✓ PhD

Working on research projects  
co-designed with Industry

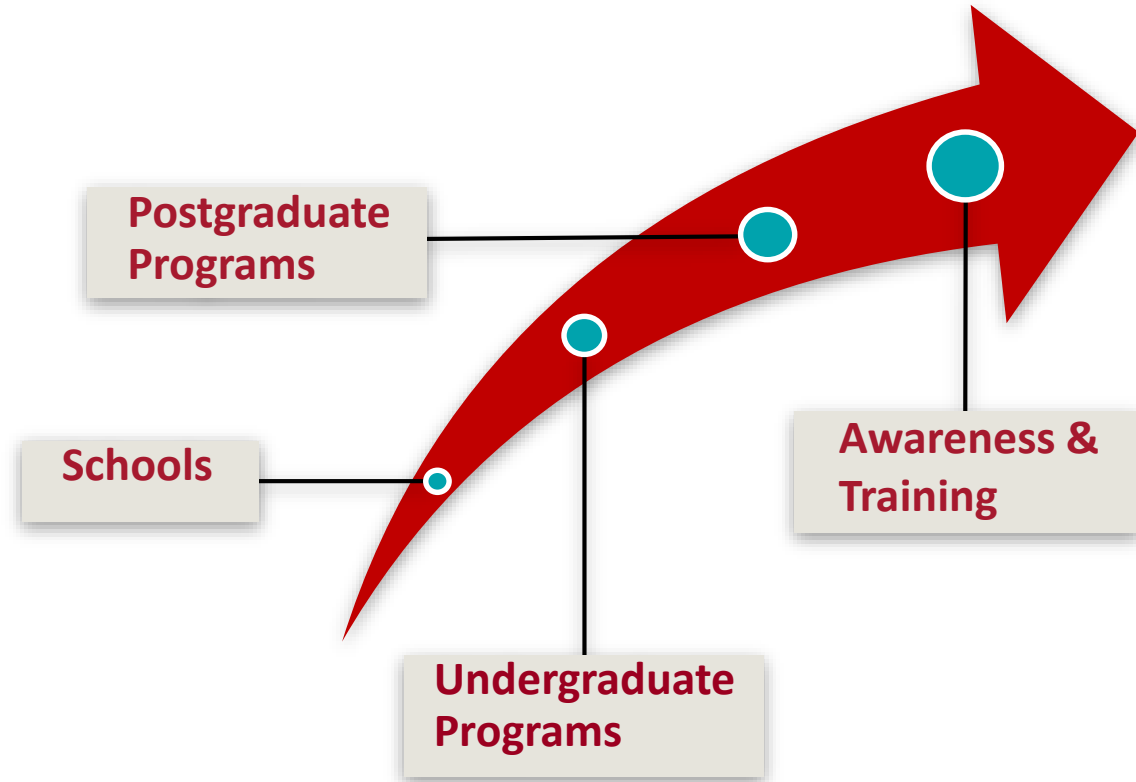


Postgraduate  
Programs

Schools

Undergraduate  
Programs

## Skills & Education



## Skills & Education

### Awareness & Training

Existing offering of short courses designed for:

- ✓ Senior Leaders
- ✓ Governance and Risk Teams
- ✓ Managers
- ✓ Technical Teams
- ✓ Every single employee



Postgraduate Programs

Schools

Undergraduate Programs

Awareness & Training

60%



## Awareness and Training

An estimated 60% of breaches originate from accidental or malicious actions of **insiders**

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An estimated 60% of breaches originate from accidental or malicious actions of **insiders**

Improving the security culture is key to increase cyber resilience and achieve privacy by design

## Awareness and Training

**We can help to transform the weakest links in your organisation into your first line of active defence**

## Awareness and Training

This relies on developing a whole-of-business awareness program

Starting from the top with boards and senior executives and reaching out to every employee

## Awareness and Training

We have designed 5 different courses in close collaboration with Optus

- OUR PROGRAM IS:**
- ✓ **Tailored**
  - ✓ **Integrated**
  - ✓ **Multidisciplinary**
  - ✓ **Customised**
  - ✓ **Engaging and Interactive**

# Awareness and Training

**EXECUTIVE CYBER  
SECURITY LEADERSHIP**

**Half-day seminar for groups of 5–10 senior leaders**

## Awareness and Training

**EXECUTIVE CYBER  
SECURITY LEADERSHIP**

**Half-day seminar for groups of 5–10 senior leaders**

**CYBER SECURITY  
MANAGEMENT**

**One-day workshop for 15–20 managers**

## Awareness and Training

<b>EXECUTIVE CYBER SECURITY LEADERSHIP</b>	<b>Half-day seminar for groups of 5–10 senior leaders</b>
<b>CYBER SECURITY MANAGEMENT</b>	<b>One-day workshop for 15–20 managers</b>
<b>CYBER GOVERNANCE AND RISK</b>	<b>Half-day workshop for 10–15 risk specialists</b>

## Awareness and Training

<b>EXECUTIVE CYBER SECURITY LEADERSHIP</b>	<b>Half-day seminar for groups of 5–10 senior leaders</b>
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## Awareness and Training

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<b>FOUNDATIONS IN CYBER SECURITY</b>	<b>Half-day workshop for up to 50 employees</b>

## Awareness and Training

### EXECUTIVE CYBER SECURITY LEADERSHIP

**Half-day seminar for a group of 5 to 10 senior leaders**

- ✓ Demystifies the different types of cyber threats
- ✓ Gives practical cyber hygiene advice
- ✓ Addresses cyber governance and compliance frameworks
- ✓ Provides practical legal guidance

Senior leaders will learn how to leverage best practice to proactively lead and manage the security culture

## Awareness and Training

### FOUNDATIONS IN CYBER SECURITY

#### Half-day workshop for up to 50 employees

- ✓ Introduces elementary principles of information security
- ✓ Encourages the adoption of effective cyber hygiene practices
- ✓ Increases the understanding of the role of everyone in the cyber governance framework

This course contributes to harden organisations against cyber threats

**OPTUS**



OPTUS MACQUARIE UNIVERSITY

# Cyber Security Hub

Contact us to discuss  
opportunities for collaboration  
**[cybersecurityhub@mq.edu.au](mailto:cybersecurityhub@mq.edu.au)**

For more information visit  
**[mq.edu.au/cyber-security-hub](https://mq.edu.au/cyber-security-hub)**