

**Title** *Secure Systems Architecture*  
**Long Title** *Certificate in Secure Systems Architecture*

<b>Awards</b>	Certificate	<b>Embedded Award</b>	No
<b>Programme Code</b>	CR_KSSAR_9	<b>Programme Credits</b>	15
<b>Mode of Delivery</b>	Part Time, Fully Online	<b>Programme Review Date</b>	May 2024
<b>No. of Semesters</b>	2	<b>Department</b>	Computer Science
<b>NFQ Level</b>	9		

### Programme Outcomes

*Upon successful completion of the programme the graduate will be able to demonstrate...:*

#### **PO1 - Knowledge - Breadth**

A mastery of advanced theoretical and practical knowledge and skills relevant to addressing the security requirements in all aspects of designing and assessing an enterprise information technology architecture

#### **PO2 – Knowledge - Kind**

A capacity to critically appraise developments in the field of cybersecurity in order to address emerging threats and employ new tools and techniques to secure all aspects of enterprise information technology architecture.

#### **PO3 – Skill - Range**

An ability to select and apply state-of-the-art tools and techniques to address the security requirements of all aspects of enterprise information technology architecture.

#### **PO4 -Skill - Selectivity**

An ability to identify and respond to emerging cybersecurity threats and selectively apply new and emerging tools and techniques to the securing of all aspects of enterprise information technology architecture.

#### **PO5 -Competence - Context**

Analyse and document a wide variety of cybersecurity risks and act to design measures to minimise those risks and their potential impact on large and medium enterprises.

#### **PO6 – Competence -Role**

Develop the technical competence required for the role of Secure Systems Architect for medium and large organisations

#### **PO7 – Competence -Learning to Learn**

An ability to reflect on the strengths and weaknesses of their own knowledge and skills. An ability to direct their continuing professional development so as to address recent developments in the cybersecurity landscape.

#### **PO7 – Competence -Insight**

A critical appreciation of the wider societal implications of design choices made in developing cybersecurity infrastructure. An ability to maintain professional integrity and high ethical standards to the application of cybersecurity and privacy principles to organisational requirements.

## Semester Schedules

### Stage 1 / Semester 1

#### Mandatory

Module Code	Module Title
CYBR9004	<u>Cryptography and Protocols</u>
CYBR9005	<u>Information Security Architecture</u>

## Semester Schedules

### Stage 2 / Semester 2

#### Mandatory

Module Code	Module Title
CYBR9006	<u>Secure Systems Architecture</u>