

Applications Security - Certificate of Achievement

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**Description**

The Applications Security Certificate of Achievement provides best practices and competencies for students to design, install and implement secure applications and services; manage, and optimize application to ensure compliance with security controls; help prevent, detect, investigate and respond to Applications Security threats and attacks; facilitate Applications Security vulnerability assessments, penetration tests and risk assessments; investigate Applications Security events and incidents, including forensic analysis; represent security interests on project teams by ensuring security standards and requirements; conduct security research, analysis and review of application solutions to ensure compliance with company security policies; evaluate new products and technologies to protect against existing and emerging security threats; and develop and implement information security policies and procedures.

A Certificate of Achievement will be awarded upon satisfactory completion of the certificate requirements specified below.

**Major Core Courses**

**Units: 21.0**

|         |   |
|---------|---|
| CIS 054 | IT Security Goals, Strategy, Policy, and Leadership |
| CIS 055 | Hacker Techniques, Exploits, and Incident Handling  |
| CIS 056 | Secure Coding in Java and .NET                      |
| CIS 057 | Web Application PEN Testing                         |
| CIS 059 | Applications in Information Security                |
| CIS 060 | Computer Forensics Fundamentals                     |
| CIS 071 | Introduction to Information Systems Security        |

**Major Elective Courses List A**

**Units: 3.0-5.0**

Select one course for a minimum of 3 units.

|         |                                      |
|---------|--------------------------------------|
| CIS 005 | Introduction to Computer Science     |
| CIS 006 | Introduction to Computer Programming |
| CIS 007 | Control Structures and Objects       |
| CS 020  | Python Application Programming       |

**Major Elective Courses List B**

**Units: 3.0-4.0**

Select one course for a minimum of 3 units.

|           |   |
|-----------|---|
| CIS 051   | Introduction to Information Technology Project Management |
| CIS 098   | Database Programming with SQL                             |
| CIS 178   | Build Automation for DevOps and QA                        |
| CIS 221   | Cyber Safety, Online Identity, and Computer Literacy      |
| CIS 247   | Information Systems Skills Challenge                      |
| COPEd 469 | Occupational Work Experience in Security Administration   |

**Total: 27.0-30.0**