## Security

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| *SMS Code* | IN618001 | *Directed Learning Hours* | 60 |
| *Level* | 6 | *Workplace or Practical Learning Hours* | nil |
| *Credits* | 15 | *Self-Directed Learning Hours* | 90 |
| *Prerequisites* | none | *Total Learning Hours* | 150 |

## Aims

To develop students' working knowledge of potential security vulnerabilities in IT systems, and the measures necessary to mitigate them.

## Learning Outcomes

At the successful completion of the course, students will be able to:

1. Analyse an application to identify its security vulnerabilities
2. Discuss coding patterns that lead to security vulnerabilities
3. Assess security risks in IT systems
4. Modify an application's source code to remove security vulnerabilities
5. Configure common network services using secure practices

## Indicative Content

* Cross site scripting and request forgery
* SQL injection
* Buffer overflow
* Applications of encryption
* Secure network communication

## Assessment

|  |  |  |
| --- | --- | --- |
| **Assessment Activity** | **Weighting** | **Learning Outcomes** |
| Lab activities | 40% |  |
| Security Audit | 40% |  |
| Exam | 20% |  |

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