

2010/11 Programmes	2010/11 Modules
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COMP 41510 Security in the Cloud Computing Environment

Credits **10** Subject **Computer Science**
 Level **4** Subject **Computer Science & Informatics**

Semester **Semester Two** Module Coordinator **Gerry Grogan/Lorraine McGInty**

Cloud Computing is a new technology where data is outsourced and stored in a secure environment (the cloud) and then provided as a service online, either by subscription or on a pay on demand basis to customers. The customer's computer may contain very little software or data (perhaps a minimal operating system and web browser only), serving as little more than a display terminal connected to the Internet. Since the cloud is the underlying delivery mechanism, cloud based applications and services may support any type of software application or service in use today. This course provides a theoretical and practical introduction to Cloud Computing.

What will I learn?

At the end of the course, students should:

1. Understand the key cloud computing concepts.
2. Be able to install and deploy some elements of the cloud.
3. Be able to understand the different services provided by the cloud and their significance.
4. Analyse the vulnerabilities inherent in the cloud structure.
5. Establish security fundamentals and design recovery solutions.
6. Scan for application weaknesses.
7. Implement best practice for web services and security.
8. Understand the key concepts of Windows Azure.

How will I learn?

	Hrs/Semester
Lectures	35
Practical }	
Laboratories }	30
Specified Learning Activities	65
Autonomous Student Learning	110
Total Workload	240

How will I be assessed?

	Final Grade	Timing
Examination: Exam	40	2 hour End of Semester Exam
Project: Project	60	Varies over the Semester

