MODULE DESCRIPTOR

Module Title

Cloud AI

Reference	CM4133	Version	1
Created	September 2023	SCQF Level	SCQF 10
Approved	April 2024	SCQF Points	15
Amended		ECTS Points	7.5

Aims of Module

Provide students with the necessary technical skills and underlying knowledge that will enable them to examine and utilise cloud-based AI services for use within client applications.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

1	Critique a range of AI services with respect to use within client applications with respect to impact on users.
2	Communicate social and ethical issues associated with using AI in mobile and web settings.
3	Develop client-server systems incorporating AI services into client applications.
4	Compose solutions for the use of AI to mine data and extract knowledge within applications.

Indicative Module Content

Machine Learning techniques: supervised learning, unsupervised learning, multi-tier client/server architectures, web services, AI model performance and scalability, data integrity, security, and privacy,

Module Delivery

Key concepts and introduced and illustrated through lectures, with students developing competencies in practical understanding and development during lab sessions.

Indicative Student Workload

Indicative Student Workload	Full Time	Part Time
Contact Hours	30	N/A
Non-Contact Hours	120	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
Actual Placement hours for professional, statutory or regulatory body		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type:	Coursework	Weighting:	100%	Outcomes Assessed:	1, 2, 3, 4

Description:	A practical coursework involving the well considered integration of cloud-based AI services into a working application.

MODULE PERFORMANCE DESCRIPTOR

Explanatory Text

The calculation of the overall grade for this module is based on 100% weighing of C1. An overall minimum grade D is required to pass the module

Module Grade	Minimum Requirements to achieve Module Grade:
A	The student needs to achieve an A in C1.
B	The student needs to achieve a B in C1.
C	The student needs to achieve a C in C1.
D	The student needs to achieve a D in C1.
E	The student needs to achieve an E in C1.
F	The student needs to achieve an F in C1.
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	None.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

1	Gupta, Pramod, and Sehgal, Naresh Kumar. Introduction to machine learning in the cloud with Python : concepts and practices. Springer 2021.
2	Walsh, Barry. Productionizing AI: How to Deliver AI B2B Solutions with Cloud and Python. Springer. 2022.
3	Bratis, Irene. The AI Product Manager's Handbook: Develop a product that takes advantage of machine learning to solve AI problems. Packt Publishing 2023.