# APPROVED

Programme Code MSCDA	Programme Duration 1			
Programme Level 9	EQF Level 7 EHEA Level Second Cycle			
Programme Credits 90				
Semester Duration	12 Week(s)			
Language of Instruction	English			
Field of Study	0611 - Computer use			
Supplementary Field of Study	Computer use			
CAO Code; QQI Progamme Code etc	Code			
Programme Extra Information	Approved on behalf of Pramod following discussion with Paul Stynes.			

## Programme Outcomes On successful completion of this programme the learner will be able to:

#### Description

On completion of the programme students will be able to: Conduct independent research and analysis in the field of Data Analytics.

On completion of the programme students will be able to: Formulate and implement a novel research idea using the latest industry practices.

On completion of the programme students will be able to: Demonstrate expert knowledge of data analysis, statistics, and the tools, techniques and technologies of Data Analytics utilised in both technical and business contexts.

On completion of the programme students will be able to: Critically assess, evaluate and communicate business & technical strategies for Data Analytics.

On completion of the programme students will be able to: Develop and implement effective business & technical solutions for Data Analytics.

On completion of the programme students will be able to: Critically assess and evaluate security, privacy, and ethical issues associated with the storage, transfer, and processing of data for analytical purposes.

#### **Semester Schedules**

#### Stage 1 / Semester 1

Core Subject	
Module Code	Title
H9DAP	Database and Analytics Programming

H9DMML1	Data Mining and Machine Learning I	
H9SDA	Statistics for Data Analytics	
Group Elective 1		
Module Code	Title Title	
H9BIBA	Business Intelligence and Business Analytics	
Group Elective 2		
Module Code	Title Title	
H8DIA	Data Intensive Architectures	
Group Elective 3		
Module Code	Title Title	
H9INN1	Innovation I	
H9INN1	Innovation I	

#### Stage 1 / Semester 2

Core Subject		
Module Code	Title	
H9DMML2	Data Mining and Machine Learning II	
H9MSO	Modelling, Simulation & Optimization	
H9RCOMP	Research In Computing	
Group Elective 1	Group Elective 1	
Module Code	Title	
H9DAPA	Domain Applications of Predictive Analytics	
Group Elective 2		
Module Code	Title	
H9SSP	Scalable Systems Programming	

Group Elective 3		
Module Code	Title	
H9INN2	Innovation II	
H9INN2	Innovation II	

### Stage 1 / Semester 3

Core Subject		
Module Code	Title	
H9DGE	Data Governance and Ethics	
H9DGE	Data Governance and Ethics	
H9RPROJ	Research Project	
H9RPROJ	Research Project	