APPROVED

Programme Code	HCDS	**Programme Duration**	2
Programme Level	6	**EQF Level**	5
EHEA Level	Short Cycle		
Programme Credits	120		

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 Outcomes

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

Description
Identify, clean, integrate, select, transform, and mine different types of datasets in consideration to ethical, privacy and data protection issues in order to summarise and present new knowledge.
Design, implement and document algorithmic solutions that demonstrate use of processes, methodologies, tools and techniques that solve known problems.
Utilise statistical analysis, modelling, data mining and machine learning tools and techniques to analyse datasets.
Communicate the results of analysis to both technical and non-technical audiences in a class room setting.
Analyse problems through both independent and collaborative efforts in order to develop solutions and provide information to meet business requirements as part of a team.
Use problem solving and analytical thinking techniques, communication, and interaction skills to support decision making.

Semester Schedules

Stage 1 / Semester 1

Core Subject	
Module Code	**Title**
H6CMPTHNK	Computational Thinking
H6DISMTHS	Discrete Mathematics

H6IDS	Introduction to Data Science
H6PSPC	Problem Solving & Programming Concepts
H6TCI	The Computing Industry

Stage 1 / Semester 2

Core Subject	
Module Code	**Title**
H6COMPSYS	Computing Systems
H6IDMD	Introduction to Data Modelling and Databases
H6PROG1	Programming I
H6STATS1	Statistics I

Stage 2 / Semester 1

Core Subject	
Module Code	**Title**
H6ADA	Advanced Databases
H6DV	Data Visualisation
H6PROG2	Programming II
H6STATS2	Statistics II

Stage 2 / Semester 2

Core Subject	
Module Code	**Title**
H6DMML	Data Mining and Machine Learning
H6ITPM	IT Project Management

H6LA	Linear Algebra

Group Elective 1	
Module Code	**Title**
H6DAPROJ	Data Analysis Project

H6PROG3	Programming III