

APPROVED

MSc in Data Analytics
School of Computing

Programme Code	MSCDA			Programme Duration	1	
Programme Level	9			EQF Level	7	
Embedded Award	No			Programme Credits	90	
Semester Duration	12 Week(s)					
Language of Instruction	English					
Valid From	2024 (July 2024)					
Validated First and last intake dates	No dates assigned					
Departments	School of Computing					
Professional Body						
<i>Professional Body</i>	<i>Recognition Status</i>	<i>Effective From</i>	<i>Interim Date</i>	<i>Professional Bodies</i>	<i>Contact Person</i>	<i>Evidence</i>
QOI	Active	01 April 2018				
CAO Code; QQI Programme Code etc	Code	Type				
Is Semesterised?	Yes					
Enrol international learners?	Yes					
Accept Erasmus exchange students?	No					
Articulation Arrangements involving advanced entry	n/a					
Names of Centres where programmes are to be provided	National College of Ireland, IFSC Campus					
Target Learner Groups	The MSc in Data Analytics is aimed at graduates of numerate disciplines e.g., Computing, Engineering, Economics, Business, Accounting, etc.).					
Programme Extra Information	Approved					
Requisite Type	Entity Title			Entity Type		
No requisites exist.						

Blocks

Stage 1

Start Date	16 September 2024
Field of Study	Computer use (0611)
Publish on web	Yes
Location	IFSC Campus
Block Award	Master of Science

End Date	31 August 2025
Is Exit Award	No
Student Quota	0

Programme Outcomes

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

Aim/Outcome	Description
POT1	Conduct substantial and extensive independent research and analysis in the field of Data Analytics.
POT1	Formulate and implement a novel research idea using the latest industry practices.
POT1	Demonstrate expert knowledge and a critical understanding of data analysis, statistics, and the tools, techniques and technologies of Data Analytics utilised in both technical and business contexts.
POT1	Critically assess, evaluate and communicate business & technical strategies for Data Analytics.
POT1	Formulate, design, assess, and implement effective business & technical solutions for Data Analytics.
POT1	Critically assess and evaluate security, privacy, sustainability, and ethical issues associated with the storage, transfer, and processing of data for analytical purposes.

Delivery Type Range

			Credits		Modules		
C/O	Title	Description	Min	Max	AND/OR	Min	Max

Associated Modules

Stage	Semester	C/O	Elective Streams	Code	Title	Version	Credits
1	Semester 1	Core Subject		9APDV	Analytics Programming & Data Visualization	1.0	5
1	Semester 1	Core Subject		9HDGS	Data Governance, Ethics, and Sustainability	1.0	5
1	Semester 1	Core Subject		9DMML	Data Mining & Machine Learning	1.0	10
1	Semester 1	Core Subject		H9SAO	Statistics & Optimisation	1.0	10
1	Semester 2	Core Subject		H9BIBA	Business Intelligence and Business Analytics	2.0	10
1	Semester 2	Core Subject		H9DLGA	Deep Learning & Generative AI	1.0	10
1	Semester 2	Core Subject		9INTERN	Internship	1.0	30
1	Semester 2	Group Elective 1		9DISS1	Data Intensive Scalable Systems	1.0	5
1	Semester 2	Group Elective 2		9MODSIM1	Modelling & Simulation	1.0	5
1	Semester 2	Group Elective 3		9DAPP1	Domain Applications	1.0	5
1	Semester 2	Group Elective 4		9RPM	Research Practicum	1.0	30
1	Semester 3	Core Subject		9INTERN	Internship	1.0	30
1	Semester 3	Group Elective 1		9DISS2	Data Intensive Scalable Systems	1.0	5
1	Semester 3	Group Elective 2		9MODSIM2	Modelling & Simulation	1.0	5
1	Semester 3	Group Elective 3		9DAPP2	Domain Applications	1.0	5
1	Semester 3	Group Elective 4		9RPM	Research Practicum	1.0	30

LO Mapping

Stage	Semester	Code	Title	Version	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6
1	Semester 1	9APDV	Analytics Programming & Data Visualization	1.0						
1	Semester 1	9DMML	Data Mining & Machine Learning	1.0						
1	Semester 1	9HDGS	Data Governance, Ethics, and Sustainability	1.0						
1	Semester 1	H9SAO	Statistics & Optimisation	1.0						
1	Semester 2	9DAPP1	Domain Applications	1.0						
1	Semester 2	9DISS1	Data Intensive Scalable Systems	1.0						
1	Semester 2	9INTERN	Internship	1.0						
1	Semester 2	9MODSIM1	Modelling & Simulation	1.0						
1	Semester 2	9RPM	Research Practicum	1.0						
1	Semester 2	H9BIBA	Business Intelligence and Business Analytics	2.0						
1	Semester 2	H9DLGA	Deep Learning & Generative AI	1.0						
1	Semester 3	9DAPP2	Domain Applications	1.0						
1	Semester 3	9DISS2	Data Intensive Scalable Systems	1.0						
1	Semester 3	9INTERN	Internship	1.0						
1	Semester 3	9MODSIM2	Modelling & Simulation	1.0						
1	Semester 3	9RPM	Research Practicum	1.0						

Detailed LO Mapping

Medical Graduate Profile

	Intellectually Curious	Environmentally Aware	Socially Conscious	Resilient	Enterprise Focussed	Ethically Oriented	Theoretical knowledge	Technical knowledge	Cognitive skills	Technical skills	Problem solving skills	Communication skills	Research skills	Application of knowledge and skills
1. Conduct substantial and extensive independent research and analysis in the field of Data Analytics.														
2. Formulate and implement a novel research idea using the latest industry practices.														
3. Demonstrate expert knowledge and a critical understanding of data analysis, statistics, and the tools, techniques and technologies of Data Analytics utilised in both technical and business contexts.														
4. Critically assess, evaluate and communicate business & technical strategies for Data Analytics.														
5. Formulate, design, assess, and implement effective business & technical solutions for Data Analytics.														
6. Critically assess and evaluate security, privacy, sustainability, and ethical issues associated with the storage, transfer, and processing of data for analytical purposes.														

MGP Dimensions

Medical Graduate Profile	Programme Description
Intellectually Curious	Intellectually Curious
Environmentally Aware	Environmentally Aware
Socially Conscious	Socially Conscious
Resilient	Resilient
Enterprise Focussed	Enterprise Focussed
Ethically Oriented	Ethically Oriented
Theoretical knowledge	Theoretical knowledge
Technical knowledge	Technical knowledge
Cognitive skills	Cognitive skills
Technical skills	Technical skills
Problem solving skills	Problem solving skills
Communication skills	Communication skills
Research skills	Research skills
Application of knowledge and skills	Application of knowledge and skills

Programmatic Review

1.2 Outline of the Programme

Brief synopsis of the programme

This programme is a MSc degree aimed at graduates of NFQ level 8/equivalent degree programmes, in numerate disciplines. It will run both on a part-time and a full-time basis 1 year (12 months) for full time delivery and 2 years (24 months) for part time delivery. The programme leads to a NFQ level 9 award of MSc in Data Analytics awarded by QQI. Graduates of the programme take up roles as data scientists and data analysts across a wide range of private companies, public sector organisations and research organisations.

Outline of staffing requirements

Lecturers will have a Masters or PhD in Computer Science or a related discipline

Outline the physical resource requirements

The MSc in Data Analytics programmes will be offered at the College's IFSC campus (Mayor Street and Spencer Dock buildings). The Mayor Street campus building is a purpose-built facility opened in 2002. The Spencer Dock building (acquired in 2023) houses the college library and additional teaching spaces.

Resource

Appropriate learning spaces to facilitate the teaching, learning & assessment strategy of the programme.

Modules on this programme will require access to classrooms and labs with projector, lectern PC, lectern laptop connectivity, and microphones.

Learners must have access to appropriate personal study space. NCI will facilitate study spaces within the library and other study rooms for either individual or group study.

Access to public cloud resources.

Learners must comply with the BYOD requirements of the programme.

Proctored online exam software, RPNOW.

Live classroom/lab host technology.

Learning Management System.

Library Access (physical and online) to books / journals etc.

Maximum number of intake groups/cohorts per annum

null

Educational and training objectives and minimum intended programme and module learning outcomes

Programme aims and objectives

The programme aims to produce high-quality, technically competent, innovative graduates that will become leading practitioners in the field of Data Analytics.

Rationale for the choice of QQI named award stem sought and for the named award title

The rationale for the choice of the QQI named award is based on the school strategy to create undergraduate and postgraduate programmes in Data Science and Data Analytics to meet industry needs.

QQI awards standards used

The QQI Science Award Standards for NFQ Level 9 have been used. These standards were used as Data Analytics is an inherently inter-disciplinary scientific field incorporating techniques from Computer Science, Mathematics and Statistics.

Comparing the MIPLOS with those of comparable programmes

A comparison with other programmes currently offered by other institutions from Ireland include:

- <li aria-setsz...> University College Dublin (UCD), MSc Data Analytics
- <li aria-setsz...> University College Dublin (UCD), MSc Data & Computational Science
- <li aria-setsz...> Maynooth University, MSc Data Science and Analytics
- <li aria-setsz...> University College Cork (UCC), MSc Data Science and Analytics
- <li aria-setsz...> National University of Ireland, Galway (NUIG), MSc in Computer Science (Data Analytics)
- <li aria-setsz...> Trinity College Dublin (TCD), MSc in Computer Science (Data Science)
- <li aria-setsz...> Dublin City University (DCU), MSc in Computing (Data Analytics)
- <li aria-setsz...> Dublin Institute of Technology (TUD), MSc in Computer Science (Data Science)
- <li aria-setsz...> Griffith College, MSc in Big Data Management and Analytics
- <li aria-setsz...> Dublin Business School (DBS), MSc in Data Analytics
- <li aria-setsz...> University of Warwick, MSc Data Analytics

UCD provides two MSc programmes in the Data Analytics domain. Firstly, their MSc Data Analytics is a Level 9 NFQ, online 3 year part time online programme where the learning outcomes of the programme focus on data collection methods, statistical method development, knowledge and application of machine learning techniques, computer programming and scientific visualization. The program is run by the UCD School of Mathematics and Statistics. In year 1, students are introduced to statistical and mathematical concepts in data analytics and data mining, and statistical programming with data. In year 2, students study predictive analytics and dealing with data sets at scale using multivariate techniques. The final year covers advanced statistical modelling methods such as Stochastic models and Bayesian analysis. A Professional Diploma in Data Analytics can also be gained in 9 months by obtaining 20 out of the 90 credits required for the MSc. This programme is intended for applicants with a degree in a numerate subject. An upper second-class honours or international equivalent is required. Those without this requirement, but with equivalent experience in industry, will also be considered on a case-by-case basis.

Secondly, their MSc Data & Computational Science also run by the UCD School of Mathematics and Statistics is designed for students from highly quantitative disciplines who wish to work in data analytics or computational science. This is a 1-year full time Level 9 NFQ course where the focus is an understanding of the interface of applied mathematics, statistics and computational science. The course includes core modules such as Optimisation in Machine Learning, Applied Matrix Theory, and Data Programming, as well as core modules in statistics and data analytics (Probability and Statistics, Predictive Analytics, Multivariate Analysis, Bayesian Analysis, Statistical Machine Learning). This programme is intended for applicants who have an Upper Second-class honours degree or higher, or the international equivalent, in a highly quantitative subject such as Mathematics, Physics, Statistics, Engineering.

The MSc in Data Science and Analytics at Maynooth University is a 12-month NFQ level 9 conversion course designed to give students the knowledge and skills to collect, process analyse and visualise data in order to extract useful information, explore patterns and evaluate models. Modules cover programming, statistics and databases, and advanced topics in modern statistical machine learning. The course includes material on the social and ethical consequences of the use of data and the implications for business and government. The course is a collaboration between the Departments of Mathematics & Statistics, Computer Science and the National Centre for Geocomputation. Applicants must have a recognised primary degree which is considered equivalent to Irish university primary degree level. The degree should be at level 8 in any subject with some mathematical content.

The MSc in Data Science & Analytics at UCC is jointly offered by the Department of Computer Science and the Department of Statistics and is provided on a 1 year full time basis. Content is focused on computing and statistics and students develop skills in database management, programming, summarisation, modelling and interpretation of data. The course provides pathways for students who have and have not previous programming and databases experience. Candidates must have obtained either a honours level 8 primary degree (minimum 2H1 honours or equivalent) in computer science or mathematical sciences or an honours level 8 primary degree (minimum 2H1 honours or equivalent) with a strong numerate content (e.g. engineering, finance, physics, biosciences or economics). Applicants who do not meet the above standard entry requirements will also be considered if they have an undergraduate degree (at Level 8) and a minimum of 5 years verifiable relevant industrial experience. Applicants who do not have a primary degree will only be considered with a minimum of 10 years verifiable relevant industrial experience.

NUIG offers an MSc in Computer Science (Data Analytics) run by the School of Engineering & Informatics. The course can be undertaken on a 1 year full time or 2 year part time basis. A 1-year part-time Diploma is also offered. The content includes topics such as large-scale data analytics, advanced data-mining and machine learning, applied regression modelling, information retrieval techniques, natural language processing, data visualisation, Web mining, linked-data analytics, simulation and modelling, digital image processing. The course attracts 30 students per year. This MSc is targeted at high-performing graduates of level 8 computer science programmes or level 8 science or engineering programmes that offer sufficient training in computing. The minimum requirement for entry to the full-time and part-time programme is normally a 2.1 degree. Additionally, part-time applicants should have 3+ years of relevant industry experience. On an exceptional basis, candidates who do not meet the requirements stated above but are deemed by the programme director to have reached an equivalent standard may also be considered.

Programme MSCDA - MSc in Data Analytics

TCD's MSc in Computer Science (Data Science) is offered on a 1 year full time basis. In the first semester, students study research methods, innovation, data analytics and machine learning. In addition, students study specialist modules in their chosen strand which for Data Science includes optimisation algorithms for data analysis, applied statistical modelling and data visualisation. For entry to the course, candidates are required to have an A II.1 (60-69%) grade or higher from a reputable university in Computing or strongly related discipline. Candidates also need to be able to be fully competent in programming in C, C++ or Java.

DCU offers an MSc in Computing (with Data Analytics as a Major option) on a 1 year full time or 2 year part time basis. Core content includes software engineering, operating systems and networks and specialist data science modules in data analytics and data mining, machine learning and statistical data analysis. The entry requirements for this programme are a 2.1 or higher in computer science or a closely related discipline. Students with a 2.2 may, in exceptional circumstances be considered but may have to attend DCU for an interview or may be asked to carry out a short exercise to ascertain their suitability for this programme (to demonstrate their mathematical and programming ability).

The MSc in Computer Science (Data Science) at TUD is a specialist is offered on either a 1 year or 1.5 year basis. The core content includes modules in probability and statistical inference, machine learning, working with data, data management, data mining and visualisation. There are also a number of option modules such as Geographic Information Systems, Programming for Big Data, Deep Learning etc.

Griffith College offers a QQI validated M.Sc. in Big Data Management and Analytics on a 1 year full time basis. The core modules are big data analytics, information retrieval and web search, concurrent and parallel programming, cloud computing, big data management, data mining algorithms and techniques, applied data science and research methods. Candidates applying for the course should have a 2.2 Level 8 honours degree in Computing Science, or a 2.2 Higher Diploma in Computing or related discipline or international equivalent and/or relevant work experience.

DBS offers a QQI validated MSc in Data Analytics at NFQ Level 9 on a 1 year full time or 2 year part time basis. Core modules include programming for data Analysis, processing and visualisation, statistics for data analytics, data storage solutions for data analytics, data mining, machine learning, applied research process for data analytics and data visualisation. Eligible applicants must hold a related science/technology/computing/business/finance degree (level 8, 2.2 or higher) granted by an institution recognised in the country where it operates. [Note: the DBS MSc degree is currently under programme review.]

The University of Warwick (Computer Science dept.) offers a 1 year full-time MSc Data Analytics taught Master's degree programme. This degree targets graduates from computer science, mathematics, and the physical sciences. The programme covers topics related to computer science, business, engineering, and mathematics. Entry requirements are a First Class Honours degree or a high 2.1 undergraduate degree in Computer Science, Statistics, Mathematics, Physics, or other quantitative disciplines. Core modules include a Dissertation Project, Research Methods, Foundations of Data Analytics, Foundations of Computing, and Data Mining. A number of optional modules are also available (e.g., High Performance Computing, Agent Based Systems, Social Informatics, Natural Language Processing).

Other matters

Programme Schedule: MSc Part Time on-campus schedule															
Name of Provider:		National College of Ireland													
Programme Title (Principal)		MSc Data Analytics				QI Award Title			Master of Science in Data Analytics			ECTS		90	
Stage (1,2,3, Award etc)		1	Exit Award Title (if relevant)			Postgraduate Diploma in Science in Data Analytics					Stage ECTS		90		
Programme Delivery Mode - one as appropriate.		Face to Face			Blended			Hybrid			Online		Workplace Learning		
								N/A							
Teaching and Learning Modalities – one or more as appropriate.		In-person face-to-face			Synchronous					Asynchronous			Work Based		
Assessment Techniques Utilised in Stage – one or more as appropriate.		Continuous Assessment			Proctored Exam – in person		Proctored Exam – online			Project		Practical Skills Demonstration		Work based	
Modules in this stage (add rows as required)															
Total Student Effort Module (hours)										Assessment – Allocation of Marks (from the module assessment strategy)					
Module Title	Semester	Mandatory (M) or Elective (E)	Credits (ECTS)	Total Hours	In person	Synchronous	Asynchronous	Independent Learning	Work Based	Continuous Assessment %	Proctored Exam – in person %	Proctored Exam – online %	Project %	Practical Skills Demonstration %	Work Based %
Statistics and Optimisation	1	M	10	250	48			202		35	65				

Analytics Programming and Data Visualization	1	M	5	125	48			77		30			70		
Data Governance, Ethics and Sustainability	1	M	5	125	36			89		40	60				
Business Intelligence and Business Analytics	2	M	10	250	48			202		20			80		
Data Mining and Machine Learning	2	M	10	250	48			202					100		
Deep Learning and Generative AI	3	M	10	250	48			202			50		50		
Data Intensive Scalable Systems (1)	3	E	5	125	48			77		40			60		
Modelling and Simulation (1)	3	E	5	125	48			77			40		60		

Domain Applications (1)	3	E	5	125	36			89			50		50		
Research Practicum	4	E	30	750	48			702					100		
Internship	4	E	30	750	48			366	336				100		

Special Regulations: Availability of elective modules will be conditional on i) timetable arrangements, and ii) that the number of students electing to take the module exceeds a given minimum number. A learner must choose two elective modules in semester 3. The Research Practicum / Internship modules cannot be compensated.

Access, transfer and progression procedures, criteria and arrangements for the programme

Information to be made available to learners about the programme

4.1 Access: Information to be made available to learners about the programme			
Information Type	Available (Yes/No)	Where to be Available	When to be available
Programme and Award Titles	Yes	Online prospectus and Non-EEA Recruitment Agents	Immediately upon revalidation
Graduate Outcomes	Yes	Online prospectus and Non-EEA Recruitment Agents	Immediately upon revalidation
Target Learner Profile	Yes	Online prospectus and Non-EEA Recruitment Agents	Immediately upon revalidation
Entry Criteria	Yes	Online prospectus and Non-EEA Recruitment Agents	Immediately upon revalidation
Advanced Entry - arrangements and criteria	Yes	Online prospectus and Non-EEA Recruitment Agents	Immediately upon revalidation
Programme duration and delivery mode(s)	Yes	Online prospectus and Non-EEA Recruitment Agents	Immediately upon revalidation
Information in Plain English?	Yes		

Entry procedures and criteria for the programmes including procedures recognition of prior learning

NCI's institutional admissions procedures are described at the following URL: <https://www.ncirl.ie/Courses/How-to-Apply>.

Applicants may apply directly to the College through its website. International (non-EEA) Applicants may apply directly or through international agents who work closely with NCI Recruitment staff members who are assigned to specific international markets.

Minimum requirements for discipline-specific learning

Applicants are normally required to hold a minimum of a level 8 honours qualification (2.2 or higher) or equivalent on the National Qualifications Framework in a cognate discipline. Given the target technical market for graduates of this programme, candidates will be required to demonstrate technical or mathematical problem-solving skills as part of previous programme learning. Graduate from disciplines which do not have technical or mathematical problem-solving skills embedded in their programme will need to be able to demonstrate technical or mathematical problem-solving skills in addition to their level 8 programme qualifications (Certifications, Additional Qualifications, Certified Experience and Assessment Tests). All applicants for the programme must provide evidence that they have prior programming experience (e.g., via academic transcripts or recognised certification).

Standard applicants for the programme are those holders of technical, numerate degrees. Such applicants are likely to gain a higher ranking in any order of merit for admission to the programme. Typically, these would be applicants who have gained a minimum of a Level 8 qualification in a numerate discipline. Typical disciplines which would fall into this category would be Computing and Informatics. Such applicants with a level 8 qualification (2.2 or higher) or equivalent are eligible for direct entry onto the programme.

Following Computing and Informatics graduates, we next assign priority to candidates with a background in Engineering, Mathematics, Physics and Chemistry. Consideration of these applications would be assessed by detailed examination of the subject content, assessments and syllabi of the programmes from which applicants have been awarded their primary degrees. Such candidates may also be assessed via an interview to ensure that they can successfully participate on the programme.

Additionally, applications will be considered for those who have gained a minimum of a Level 8 qualification in a programme with a significant IT component and/or significant numerate element. Typical programmes which would fall into this category could include Management Information Systems, Accounting, Economics, Marketing Management, Sociology and Biology. Such programmes in this second category may vary greatly in mathematical and information technology content. Consideration of these applications would be assessed by detailed examination of the subject content, assessments and syllabi of the programmes from which applicants have been awarded their primary degrees. In addition, the programme director may call candidate learners with qualifications in this second category of disciplines to be assessed via an interview to ensure that (in coming from a less technical or non-technical background) they can successfully participate on the programme.

Minimum experiential requirements (if applicable)

Applicants who do not fall into either the first or second categories above may also be admitted based on Recognition of Prior Experiential Learning (RPEL). RPEL will be assessed based on a minimum of 3 years' work experience and by portfolio or other appropriate method to establish their eligibility as measured against level 8 award standards.

Minimum language proficiency requirements

Applicants whose first language is not English must attach a certified qualification of proficiency in English. The following qualifications will fulfil the College's minimum requirements for postgraduate programmes:

IELTS	TOEFL (PBT)	TOEFL (CBT)	TOEFL (IBT)	CEF	Irish Leaving Certificate	UK GCSE
6.0	600	200	100	B2	OC	Pass

Minimum mathematical proficiency requirements

Standard applicants for the programme are those holders of technical, numerate degrees **having achieved** a minimum of a level 8 honours qualification (2.2 or higher) or equivalent on the National Qualifications Framework in a cognate discipline. Typical disciplines which would fall into this category would be Computing and Informatics. Such applicants with a level 8 qualification (2.2 or higher) or equivalent are eligible for direct entry onto the programme and are deemed to have met the minimum mathematical proficiency requirements. Consideration of applications from candidates with a background in Engineering, Mathematics, Physics and Chemistry would be assessed by detailed examination of the subject content, assessments and syllabi of the programmes from which applicants have been awarded their primary degrees. Typically, such candidates will have completed a number of mathematics or statistics-based modules and will also be deemed to have met the minimum mathematical proficiency requirements. For other

applicants, consideration of these applications would be assessed by detailed examination of the subject content, assessments and syllabi of the programmes from which applicants have been awarded their primary degrees. In these cases, applicants' transcripts are reviewed by the Programme Director to ensure that candidates have completed mathematics/statistics-based modules to a level that is deemed to meet the minimum mathematical proficiency requirements (i.e., at least two modules in topics such as Operations Research, Discrete Mathematics, Probability and Statistics, Quantitative Analysis, Reasoning under Uncertainty, etc.). In addition, the Programme Director may call candidate learners to be assessed via an interview to ensure that (in coming from a less technical or non-technical background) they can successfully participate on the programme.

Progspecific RPL criteria&arrangements: entry, module exemptions,advanced entry&direct award access

[Admissions, Registration and Student Support Policies \(ncirl.ie\)](#)

[Application FAQs | National College of Ireland \(ncirl.ie\)](#)

[Recognition of Prior Experiential Learning \(RPEL\) | NCI \(ncirl.ie\)](#)

Applicants who do not have the advertised minimum academic qualifications for entry will be assessed based on prior learning and work experience, combined with a demonstrated commitment towards meeting the academic requirements of the programme. Entry will be assessed using a written application from the candidate and by interview.

Recognition of Prior (Experiential) Learning (RPEL) will be assessed in accordance with college policy (<https://www.ncirl.ie/Courses/How-to-Apply/Recognition-of-Prior-Experiential-Learning>). This may require a portfolio of evidence and/interview or other assessment as determined by the programme team. RPL/RPEL candidates will be required to demonstrate suitable technical or mathematical problem-solving skills. Formal recognition of knowledge or experience that has been gained from work, life or previous study will be assessed using the QQI Computing or Science Awards Standards at level 8.

Where there is insufficient evidence of numeracy skills, applicants may be required to complete an assessment to determine their suitability to the programme.

Applications for RPEL consideration are made directly to the College. All applicants seeking RPEL entry will be asked to attend an interview and will be requested to produce a portfolio describing the prior experience in the context of potentially creditable learning outcomes. The portfolio is evaluated and compared against the module to provide evidence of:

- Validity: Does the evidence supplied by the applicant meet all/part of the outcomes/assessment criteria?
- Sufficiency: Is the evidence sufficient proof of the outcomes or assessment criteria?
- Currency: Is the evidence recent? NCI normally expects learners experience or qualifications have been gained within the last 3 years
- Authenticity: Is the evidence provided the learners own work?

In assessing whether learning gained from experience matches learning outcomes for a particular module, the assessors apply the following criteria:

- Has the appropriate balance between theory and practical application been attained?
- Is the learning achieved transferable?
- Has the appropriate academic level of learning been achieved?

Documents

No Documents

Status Log

<i>Initial Status</i>	<i>End Status</i>	<i>Available</i>	<i>Date</i>	<i>Comment</i>
Vice Dean (Postgraduate)	Approved	Hegarty Shauni	14/Oct/2024 11:28	Yes
Awaiting Programme Coordinator	Vice Dean (Postgraduate)	Hegarty Shauni	14/Oct/2024 11:26	Approved
Draft	Awaiting Programme Coordinator	Hegarty Shauni	14/Oct/2024 11:25	Approved.
	Draft	Hegarty Shauni	22/Jul/2024 10:39	Programme went through revalidation in 2024, significant changes.

Competency Mapping

PO Departments	Programme Learning Outcome	Competencies
POT1 - Knowledge - Breadth (An understanding of the theory, concepts and methods pertaining to a field (or fields) of learning)	1. Conduct substantial and extensive independent research and analysis in the field of Data Analytics.	
POT1 - Knowledge - Breadth (An understanding of the theory, concepts and methods pertaining to a field (or fields) of learning)	2. Formulate and implement a novel research idea using the latest industry practices.	
POT1 - Knowledge - Breadth (An understanding of the theory, concepts and methods pertaining to a field (or fields) of learning)	3. Demonstrate expert knowledge and a critical understanding of data analysis, statistics, and the tools, techniques and technologies of Data Analytics utilised in both technical and business contexts.	
POT1 - Knowledge - Breadth (An understanding of the theory, concepts and methods pertaining to a field (or fields) of learning)	4. Critically assess, evaluate and communicate business & technical strategies for Data Analytics.	
POT1 - Knowledge - Breadth (An understanding of the theory, concepts and methods pertaining to a field (or fields) of learning)	5. Formulate, design, assess, and implement effective business & technical solutions for Data Analytics.	
POT1 - Knowledge - Breadth (An understanding of the theory, concepts and methods pertaining to a field (or fields) of learning)	6. Critically assess and evaluate security, privacy, sustainability, and ethical issues associated with the storage, transfer, and processing of data for analytical purposes.	