

# CERTIFICATE OF VALIDATION

#### New validation

Validation Process: Revalidation

Provider Name	Dublin Business School
Date of Validation	09-Sep-21

	Code	Title	Award	Exit
Principal Programme	PG24665	Master of Science in Data Analytics	Master of Science (Masters Degree at NFQ Level 9) 9M21623 90 credits	N/A
Embedded Programme	PG24730	Postgraduate Diploma in Science in Data Analytics	Postgraduate Diploma in Science (Postgraduate Diploma at NFQ Level 9) 9M21625 60 credits	Yes
Embedded Programme	PG24731	Certificate in Data Analytics	Certificate (Minor Award at NFQ Level 9) 9H21627 30 credits	Yes

	First Intake	Last Intake
Enrolment Interval	01-Sep-21	31-Aug-26

# Principal Programme

	Full Time	Part Time	Delivery Mode: full-time /	Full Time, Part Time
Maximum Intakes per Annum:	3	3	part-time	
Minimum Learners per Intake:	5	5		
Maximum Learners per Intake:	100	50		
Duration (months)	12	18		

# **Target Learner Groups**

The Master of Science in Data Analytics programme is aimed at learners with a minimum second-class second-division (2.2) Level 8 honours bachelor's degree or Higher Diploma in a cognate area who wish to specialise in the field of Data Analytics with a view to entering industry. Cognate subjects include computer science, data science, technology, networking, information systems, engineering, general science, mathematics, statistics, data analytics or related discipline. Learners with a minimum second-class second-division (2.2) Level 8 honours bachelor's degree in a non-cognate area plus 3–5 years' professional experience in a related field and who require a qualification in this area in order to progress professionally. Learners can also access this programme through RPL. Such applicants will be assessed on a case-by-case basis. Due to the mathematical nature of the content, candidates will be required to show sufficient competency in mathematics, based on prior learning or professional experience. This can be further defined as module of mathematics/mathematics and statistics equivalent to a minimum of 10 ECTS in their primary degree.

On completion of this programme, learners will have the expertise to operate at a professional level and effectively integrate their skills into decision-making in their company. Through the Applied Research Project, learners will develop independent research and problem-solving skills which will be valuable in a variety of contexts in the workplace.



#### **Brief Synopsis of the Programmes**

This Master of Science in Data Analytics has been designed to meet the growing need for graduates with data science skills in the light of increasing applications of new and existing technologies and techniques such as statistical analysis, machine learning and data visualisation across many industries throughout the global economy. Given the rapid growth in internet data usage, the shift to cloud computing, and the rate at which Irish businesses integrate data and analytics into their daily operations, Data Analytics is an identifiable discipline with a breadth and depth of content that encompasses many of the subfields (e.g. software development, machine learning, data visualisation that form the modern Al ecosystem).

Semester one (FT) lays the groundwork for the programme and encompasses modules that focus on providing a solid and comprehensive understanding of the relevant concepts, a proficiency in the use of programming skills to gather, analyse, process and visualise data, statistics for data analytics and the application of pattern recognition in machine learning. Learners develop advanced applied skills in essential areas such as programming, statistical tools and techniques, techniques for pattern recognition on complex data sets, while also offering theoretical knowledge of cognitive science.

Semester two (FT) builds on this by covering advanced modules in which the knowledge, understanding and skills acquired in the first semester can be employed. Semester two modules offer advanced and applied skills in topics such as data and network mining, databases and data storage, graph, data visualisation including foundations in linguistics, statistical analysis and applications. Semester two also comprises an Applied Research Methods module, which focuses on research and enquiry skills. This module will inform learners' Applied Research Project in Semester three (FT).

In addition, the programme aims to incorporate advanced transversal skills in each module for the professional development of learners to enhance their employability options. This will enable the learner to integrate seamlessly into an organisation by addressing skills such as leadership, problem solving, teamwork, time management and academic writing that are essential for a Level 9 graduate.

It is a 1-year full-time, 18 months part-time programme with five 10 ECTS and two 5 ECTS taught modules, and a 30 ECTS Applied Research Project.

Teaching and Learning Modes	<ol> <li>Directed Learning</li> <li>E-learning (directed)</li> <li>E-learning (self-directed)</li> <li>Group Discussions</li> <li>Lectures / Classes</li> <li>Practical Sessions</li> </ol>
	7. Tutorials
Approved Countries	Ireland

#### **Physical Resource Requirements**

Learners are required to have ongoing access to a computer, related software and a reliable internet connection. Learners will be provided with a full online induction which provides an introduction to the College generally as well as an IT induction and sessions on learning online. There is no programme-specific technology required for the programme.

Staff Profiles	Qualifications and Experience	WTE
Lecturer	Staff delivering this programme will hold a minimum of a Level 9 Postgraduate Diploma or Master's degree in Data Analytics or in the following, or a related area:	7
	<ul> <li>Mathematics</li> <li>Statistics</li> <li>Computing</li> <li>Computer Science</li> <li>Software Development</li> <li>Management Information Systems</li> <li>Artificial Intelligence</li> <li>Data Science</li> <li>Data Analytics</li> <li>Business Analytics</li> </ul>	
	Holders of Level 8 honours Bachelor's degrees in a relevant discipline, who are exceptionally qualified by virtue of significant senior industry experience, will also be considered.	
Administration & Support Staff	Such as Library, Admissions, Student Experience, Finance etc. Experience and qualifications relevant to the role.	0.64
Course Director	The Course Director for this programme will have a minimum of a NFQ Level 9 Postgraduate Diploma or Masters qualification in Computer Science or a related discipline along with programme management/ academic leadership experience.	0.1
Subject Matter Expert	The Subject Matter expert for this programme will have a minimum of a NFQ Level 9 Postgraduate Diploma or Masters qualification in in Computer Science or a related discipline along with programme management experience and subject matter expertise.	0.1

Approved Centres			Maximum Number of Learners per Intake per Centre
	38628L Dublin Business School	5	150

Additional Locations		Minimum Enrolment per Annum	Maximum Enrolment per Annum
	N/A		

Learner Teacher Ratios	Learning Activity	Ratio
	Face to face on site lecture-led classroom-based sessions	1:50
	Face to face on site workshops	1:25
	Practical on site lab computer lab sessions	1:35
	Online class (broadcast live - non interactive transmission)	1:50
	Online class (broadcast live - interactive such as Zoom)	1:25
	Asynchronous (On Demand content)	n/a

Programme being replaced by this Programme	Prog Code	Programme Title	Validated
	PG23171	Master of Science in Data Analytics	28-Sep-17



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# **Embedded Programme**

# Validation Process: Revalidation

Code	Title			Award			Exit
PG24730	Postgraduate Diplom	oma in Science in Data Analytics		Postgraduate Diploma in Science (Postgraduate Diploma at NFQ Level 9) 9M21625 60 credits			Yes
		Full Time	Part Tir	ne	Delivery Mode: full-time	Full Time, Part	Time
Maximum I	ntakes per Annum:	1	1		part-time		
Minimum L	earners per Intake:	1	1				
Maximum L	earners per Intake:	1	1		-		

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# Target Learner Groups

**Duration** (months)

As per the Principal Programme..

# **Brief Synopsis of the Programmes**

The Postgraduate Diploma in Science in Data Analytics is an embedded exit award in the Master of Science in Data Analytics. It has been designed to meet the growing need for practical applied skills in this emerging area and is for learners who cannot complete the full Master's award.

Semester one (FT) lays the groundwork for the programme and encompasses mostly foundational modules that focus on providing a solid and comprehensive understanding of the relevant concepts, a proficiency in the use of programming skills to gather, analyse, process and visualise data, statistics for data analytics and the application of pattern recognition in machine learning. Learners develop advanced applied skills in essential areas such as programming, statistical tools and techniques, techniques for pattern recognition on complex data sets, while also offering theoretical knowledge of cognitive science.

Semester two (FT) builds on this by covering advanced modules in which the knowledge, understanding and skills acquired in the first semester can be employed. Semester two modules offer applied skills in topics such as data and network mining, databases and data storage, graph, data visualisation including foundations in linguistics, statistical analysis and applications.

In addition, the programme aims to incorporate advanced transversal skills in each module for the professional development of learners to enhance their employability options. This will enable the learner to integrate seamlessly into an organisation by addressing skills such as leadership, problem solving, teamwork, time management and structured writing that are essential for a Level 9 graduate.

It is a 1-year full-time, 18 months part-time programme with five 10 ECTS and two 5 ECTS taught modules.

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Teaching and Learning	1. Directed Learning
Modes	2. E-learning (directed)
	3. E-learning (self-directed)
	4. Group Discussions
	5. Lectures / Classes
	6. Practical Sessions
	7. Tutorials
	8. Workshops

Approved Countries	Ireland



# **Physical Resource Requirements**

Learners are required to have ongoing access to a computer, related software and a reliable internet connection. Learners will be provided with a full online induction which provides an introduction to the College generally as well as an IT induction and sessions on learning online. There is no programme-specific technology required for the programme.

Staff Profiles	Qualifications and Experience	WTE
Lecturer	<ul> <li>Staff delivering this programme will hold a minimum of a Level 9 Postgraduate Diploma or Master's degree in Data Analytics or in the following, or a related area:</li> <li>Mathematics</li> <li>Statistics</li> <li>Computing</li> <li>Computer Science</li> <li>Software Development</li> <li>Management Information Systems</li> <li>Artificial Intelligence</li> <li>Data Science</li> <li>Data Analytics</li> <li>Business Analytics</li> <li>Holders of Level 8 honours Bachelor's degrees in a relevant discipline, who are exceptionally gualified by virtue of significant senior industry experience, will also be considered.</li> </ul>	7
Administration &Support Staff	Such as Library, Admissions, Student Experience, Finance etc. Experience and qualifications relevant to the role.	0.64
Course Director		
Subject Matter Expert	The Subject Matter expert for this programme will have a minimum of a NFQ Level 9 Postgraduate Diploma or Masters qualification in in Computer Science or a related discipline along with programme management experience and subject matter expertise.	0.1

Approved Centres	Centre	Minimum Number of Learners per Intake per Centre	Maximum Number of Learners per Intake per Centre
	38628L Dublin Business School	1	1

Additional Locations		 Maximum Enrolment per Annum
	N/A	



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Learner Teacher Ratios	Learning Activity	Ratio
	Face to face on site lecture-led classroom-based sessions	1:50
	Face to face on site workshops	1:25
	Practical on site lab computer lab sessions	1:35
	Online class (broadcast live - non interactive transmission)	1:50
	Online class (broadcast live - interactive such as Zoom)	1:25
	Asynchronous (On Demand content)	n/a

Programme being replaced by this Programme	Prog Code	Programme Title	Validated
	PG23172	Postgraduate Diploma in Science in Data Analytics	28-Sep-17



# **Embedded Programme**

# Validation Process: **Revalidation**

Code	Title	Award	Exit
PG24731	Certificate in Data Analytics	Certificate (Minor Award at NFQ Level 9) 9H21627 30 credits	Yes

	Full Time	Part Time	Delivery Mode: full-time /	Full Time, Part Time
Maximum Intakes per Annum:	1	1	part-time	
Minimum Learners per Intake:	1	1		
Maximum Learners per Intake:	1	1		
Duration (months)	3	6		

#### **Target Learner Groups**

As per the Principal Programme.

#### **Brief Synopsis of the Programmes**

The Certificate in Data Analytics is an embedded award in the Master of Science in Data Analytics. It is offered as an exit award to learners who cannot continue with the taught component of the first semester (FT) of this programme.

The Certificate comprises three modules which focus on providing a solid knowledge, practical and cognitive skills in programming for data analytics, statistics for data analytics and machine learning and pattern recognition. Learners will be able to apply these skills in a diverse array of sectors and business applications. In addition, learners will demonstrate their knowledge, and skills in a form of portfolio that can be shared with future employers.

It is a 3 month full-time, 6 month part-time programme with three 10 ECTS taught modules.

Teaching and Learning	1. Directed Learning
Modes	2. E-learning (directed)
	3. E-learning (self-directed)
	4. Group Discussions
	5. Lectures / Classes
	6. Practical Sessions
	7. Tutorials
	8. Workshops

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### Physical Resource Requirements

Learners are required to have ongoing access to a computer, related software and a reliable internet connection. Learners will be provided with a full online induction which provides an introduction to the College generally as well as an IT induction and sessions on learning online. There is no programme-specific technology required for the programme.

Staff Profiles	Qualifications and Experience	WTE
Lecturer	<ul> <li>Staff delivering this programme will hold a minimum of a Level 9 Postgraduate Diploma or Master's degree in Data Analytics or in the following, or a related area:</li> <li>Mathematics</li> <li>Statistics</li> <li>Computing</li> </ul>	7
	<ul> <li>Computer Science</li> <li>Software Development</li> <li>Management Information Systems</li> <li>Artificial Intelligence</li> <li>Data Science</li> <li>Data Analytics</li> <li>Business Analytics</li> </ul>	
	Holders of Level 8 honours Bachelor's degrees in a relevant discipline, who are exceptionally qualified by virtue of significant senior industry experience, will also be considered.	
Administration & Support Staff	Such as Library, Admissions, Student Experience, Finance etc. Experience and qualifications relevant to the role.	0.64
Course Director	The Course Director for this programme will have a minimum of a NFQ Level 9 Postgraduate Diploma or Masters qualification in Computer Science or a related discipline along with programme management/ academic leadership experience.	0.1
Subject Matter Expert	The Subject Matter expert for this programme will have a minimum of a NFQ Level 9 Postgraduate Diploma or Masters qualification in in Computer Science or a related discipline along with programme management experience and subject matter expertise.	0.1

Approved Centres	Centre		Maximum Number of Learners per Intake per Centre
	38628L Dublin Business School	1	1

Additional Locations		Minimum Enrolment per Annum	Maximum Enrolment per Annum
	N/A		

Learner Teacher Ratios	Learning Activity	Ratio
	Face to face on site lecture-led classroom-based sessions	1:50
	Face to face on site workshops	1:25
	Practical on site lab computer lab sessions	1:35
	Online class (broadcast live - non interactive transmission)	1:50
	Online class (broadcast live - interactive such as Zoom)	1:25
	Asynchronous (On Demand content)	n/a

Programme being replaced by this Programme	Prog Code	Programme Title	Validated
	PG23240	Certificate in Data Analytics	28-Sep-17



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# Conditions of Validation of the Programmes Covered by this Certificate of Validation

#### Part 1: Statutory Conditions of Validation

The statutory (section 45(3) of the 2012 Act) conditions of validation are that the provider of the programme shall:

1. Co-operate with and assist QQI in the performance of QQI's functions in so far as those functions relate to the functions of the provider,

2. Establish procedures which are fair and consistent for the assessment of enrolled learners to ensure the standards of knowledge, skill or competence determined by QQI under section 49 (1) are acquired, and where appropriate, demonstrated, by enrolled learners,

3. Continue to comply with section 65 of the 2012 Act in respect of arrangements for the protection of enrolled learners, if applicable, and

4. Provide to QQI such information as QQI may from time to time require for the purposes of the performance of its functions, including information in respect of completion rates.

# Part 2 Conditions of Validation Established by QQI Under section 45(4)(b) of the 2012 Act)

## Part 2.1 Condition of Validation Concerning a Change in the QQI Award or Award Standard

1. Where QQI changes an award title, an award specification or an award standard that a programme depends upon, the provider shall not enrol any further learners on the affected programmes unless informed otherwise in writing by QQI (e.g. by the issue of a revised certificate of validation). The programme is considered validated for learners already enrolled on the affected programme.

# Part 2.2 Condition of Validation Concerning the Duration of Enrolment

1. The duration of enrolment is the interval during which learners may be enrolled on the validated programme.

Validation is determined by QQI for a specified number of years of enrolment appropriate to the particular programme as indicated on the certificate on validation subject to unit 9.2.1. It is a condition of validation that the programme does not enrol any new learners outside this interval. A typical duration would be five years.

If a provider wishes to continue to enrol learners to the programme beyond this interval the provider must arrange in good time for it to be validated again by QQI, or exceptionally the provider may apply for extension of the duration of enrolment (unit (14)). In this context the provider may apply for validation of the programme from first principles or, alternatively, the provider may avail of the process for revalidation (unit (13)) by QQI.

# Part 2.3 General Condition of Validation

The provider of the programme shall:

1. Ensure that the programme as implemented does not differ in a material way from the programme as validated; differing in a material way is defined as differing in any aspect of the programme or its implementation that was material to QQI's validation criteria.

2. Ensure that the programme is provided with the appropriate staff and physical resources as validated.

3. Implement in respect of the programme its written quality assurance procedures (as approved by QQI).

4. Make no significant change to the programme without the prior approval of QQI. (See unit (8)).

5. Unless otherwise agreed by QQI in writting, start implementing the programme as validated and enrol learners within 18 months of validation.

6. Continue in respect of the validated programme to comply with section 56 of the 2012 Act in respect of procedures for access, transfer and progression.

7. Implement the programme and procedures for assessment of learners in accordance with the Approved Programme Schedule and notify QQI in writing of any amendments to this arising from changes to the programme; see unit (9).

8. When advertising and promoting the programme and awards, use the programme title as validated, and the correct QQI award title(s), award type(s) and award class(es) indicating the level of the award(s) on the National Framework of Qualifications.



# 9. Adhere to QQI regulations and procedures for certification.

10. Notify QQI in writing without delay of: a. Any material change to the programme; a. Anything that impacts on the integrity or reputation of the programme or the corresponding QQI awards; b. Anything that infringes the conditions of validation; or c. Anything that would be likely to cause QQI to consider reviewing the validation.

11. Notify QQI in writing to determine the implications for the provider's validated programmes, where the provider is likely to, or planning to, merge (amalgamate) with another entity or to acquire, or be acquired by, another entity (see unit (12.5)).

12. Report to QQI, when required or requested, on its implementation of the programme and compliance with the conditions of validation.

# Part 2.4 General Condition of Validation Arising from Specialised Validation Policy and Criteria

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# Part 2.5 Special Conditions of Validation