



CERTIFICATE OF VALIDATION

Provider name	National College of Ireland
Date of validation	20-07-2016

	First Intake	Last Intake
Enrolment interval	September 2016	September 2020

	Code	Title	Award	Duration
Principal programme	PG22548	Bachelor of Science (Honours) in Computing	Bachelor in Science (Honours) (8M20305)	Four years
Embedded programme				
Embedded programme				

	Name	Maximum number of learners	Minimum number of learners
Approved centre	National College of Ireland	As per the validated programmes	As per the validated programmes

Target learner groups	As per the validated programmes
Approved countries for provision	Ireland
The teaching and learning modalities	As per the validated programmes
Brief synopsis of the programme (e.g. who it is for, what is it for, what is involved for learners, what it leads to.)	As per the validated programmes
Specifications for teaching staff	As per the validated programmes
Specifications for the ratio of learners to teaching-staff	As per the validated programmes

Programmes being replaced		
Code	Title	Comment
		N/A

**Conditions of validation**

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

- a) 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,
- b) 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,
- c) continue to comply with [section 65 of the 2012 Act](#) in respect of arrangements for the protection of enrolled learners, if applicable, and
- d) 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.

Conditions from HET Core Validation Policy and Criteria 2010, Revised 2013

The provider of the programme shall (for each programme):

1. Maintain the status of the programme(s) recognition;
2. Establish, having regard to existing quality assurance procedures, procedures for quality assurance for the purpose of further improving and maintaining the quality of education and training which is provided, organised or procured by that provider as part of the programme(s) concerned, and agree those procedures with QQI;
3. Operate quality assurance procedures agreed with QQI;
4. Implement procedures for the assessment of learners which are consistent with Assessment and Standards, Revised 2013;
5. Implement the procedures described in the document Policies, Actions and Procedures for Access, Transfer and Progression for Learners;
6. Implement any special conditions of validation attached to the relevant awards standards.

Other conditions from HET Core Validation Policy and Criteria 2010, Revised 2013

7. Notify QQI of any change in circumstances affecting the provider which could affect or be perceived to affect the provision of the programme(s). This includes significant changes in corporate or academic governance, ownership, legal status, profile of teaching staff, profile of learners, numbers enrolled, facilities, or resources;
8. Maintain learner data records (personal identification, progression, module marks, stage classification etc.) in order to assist QQI in the performance of its functions;
9. Provide the information required by QQI's award making and monitoring functions, including information in respect of completion rates;
10. Implement the programme in accordance with the **approved programme schedule(s)** (appended) and current assessment strategies;
11. Subject to Section 4.6.1 of *HET Core Validation Policy and Criteria 2010, Revised 2013*, obtain QQI's approval prior to substantially amending the programme's minimum intended learning outcomes, save in the case of incremental enhancements arising from the implementation of findings of the provider's agreed quality assurance procedures;
12. Notify QQI of any information concerning the programme(s), or circumstances that may reasonably be expected to give QQI cause to consider reviewing the programme. Explicitly this includes where another awarding body withdraws or seeks to withdraw validation from the programme(s) and /or any alterations to accreditations (additions or withdrawals) by a professional or regulatory body;
13. Implement the programme(s) as agreed with the resources indicated;
14. Adhere to, and implement the Provider Lifecycle of Engagements.



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Approved Programme Schedule(s)

Table 1 PROPOSED PROGRAMME SCHEDULE FOR STAGE 4

Name of Provider		National College of Ireland		Programme Codes			BSHC/ PG21886				
Programme Title (i.e. named award)		BSc (Honours) in Computing									
Award Title (QQI named award)		Bachelor of Science (Hons)									
Stage Exit Award Title											
Modes of Delivery (FT/PT/ACCS/BLENDED/OC etc)		FULL_TIME,PART_TIME									
Stage		Award			Number of Stages				4		
Award Class		Major			Award NQF Level				8		
Award EQF Level		6			Stage Credits (ECTS)				60		
Stage NQF Level		8			Stage EQF Level				6		
Date Effective		14/09/16			ISCED Subject Code						
Ref	Module Title	Semester	Module		ECTS Credit Number	Total Student Effort			Allocation of Marks		
			Status (M/E)	NQF Level		Total Hours	Contact Hours	Independent Learning	Coursework %	End of Module Assessment %	Total %
4.1	Software Project	1, 2	M	8	20	500	48	452	100	0	100
4.2	Strategic Management	1	M	8	5	125	36	89	30	70	100
4.3	Introduction to Artificial Intelligence	1	M	8	5	125	36	89	40	60	100
4.4	Web Services and API Development	1	M	8	5	125	36	89	75	25	100
4.5	Cloud Computing	1	GE1	8	5	125	36	89	0	100	100
4.6	Computer Graphics	1	GE2	8	5	125	36	89	50	50	100



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	Design and Animation											
4.7	Security Principles	1	GE4	8	5	125	36	89	30	70	100	
4.8	Business Data Analysis	1	GE5	8	5	125	36	89	50	50	100	
4.9	IoT Principles	1	GE6	8	5	125	36	89	40	60	100	
4.10	Data Application Development	1	GE1/GE5	8	5	125	48	77	100	0	100	
4.11	Multimedia and Mobile Application Development	1	GE2/GE3/GE4/GE6	8	5	125	36	89	50	50	100	
4.12	Security Principles	2	GE7	8	5	125	36	89	50	50	100	
4.13	Secure	2	GE7	8	5	125	36	89	60	40	100	



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	Application Programming											
4.14	Computing Infrastructure	2	GE1	8	5	125	36	89	70	30	100	
4.15	Applied Artificial Intelligence	2	GE2	8	5	125	36	89	50	50	100	
4.16	Cloud Gaming	2	GE2	8	5	125	36	89	40	60	100	
4.17	Advanced Mobile Application Development	2	GE4	8	5	125	36	89	100	0	100	
4.18	Data and Web Mining	2	GE5	8	10	250	48	202	50	50	100	
4.19	Advanced Business	2	GE5	8	5	125	36	89	40	60	100	



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	Data Analysis											
4.20	Data Mining and Visualisation Principles	2	GE6	8	5	125	36	89	100	0	100	
4.21	IoT Application Development	2	GE6	8	5	125	36	89	100	0	100	
4.22	Distributed Systems	2	GE1/GE3/GE4	8	5	125	36	89	75	25	100	
4.23	Cloud Application Development	2	GE1/GE3/GE6	8	5	125	36	89	100	0	100	
4.24	Usability Design	2	GE2/GE3/GE4	8	5	125	36	89	100	0	100	
4.25	Advanced Secure	2	GE7	8	5	125	36	89	50	50	100	



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	Programming										
4.26	Penetration Testing	2	GE7	8	5	125	36	89			100
4.27	Digital Forensics	2	GE7	8	5	125	36	89	50	50	100



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Special Regulations:

The Software Project module is assessed over both semesters in the final year and accounts for 15 credits per semester. Learners may specialise in one of 6 areas in their final year: Cloud Computing, Gaming & Multimedia, Software Development, Mobile Application Development, Data Analytics Internet of Things or Cyber Security.

Cloud Computing GE1: Cloud Computing, Data Application Development, Computing Infrastructure, Cloud Application Development and Distributed Systems modules.

Gaming & Multimedia GE2: Computer Graphics Design & Animation, Multimedia and Mobile Application Development, Usability, Applied Artificial Intelligence and Cloud Gaming modules.

Software Development GE3: Data Application Development, Multimedia and Mobile Application Development, Usability, Cloud Application Development and Distributed Systems modules.

Mobile Application Development GE 4: Business & Network Security, Multimedia and Mobile Application Development, Usability, Advanced Mobile Application Development and Distributed Systems modules.

Data Analytics GE5: Business and Data Analysis, Data Application Development, Advanced Business Data Analysis and Data & Web Mining.

Internet of Things GE6: Multimedia and Mobile Application Development; IoT Principles; IoT Application Development; Cloud Application Development; Data Mining and Visualisation Principles.

Cyber Security GE7: Security Principles, Secure Application Programming, Advanced Secure Programming, Penetration Testing, Digital Forensics



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