MASTER OF SCIENCE IN
FINTECH

FACTFILE

Full-time Schedule

Duration
1 year; 3 semesters with a practicum or internship

Delivery:
Campus – Classes will take place face-to-face on campus

Start Date
Sept 2026

Indicative Timetable
Students need to be available 09.00 - 18.00 Monday to Friday. Class days and times vary

EU Fee
€7,000 total fee (EU/Ireland applicants) (Fees revised annually)

€ Spread the cost with our direct debit plan

Application: Apply online at **www.ncirl.ie**

Course Description

The MSc in Fintech programme was designed to provide students with the essential skills in Financial Technologies covering a variety of topics from both business and technical domains. Students will be familiarised with (i) the technical landscape of fintech domains, such as, classical, advanced, and state-of-the-art financial techniques and analytics methods including their theoretical foundations and mathematical underpinnings, and (ii) the deep understanding of impacts, design, application, and operationalisation of fintech solutions in business contexts.

NCI is perfectly placed to deliver an industry-focused programme inspired by its location at the heart of the International Financial Services Centre. The course is completely delivered by faculty and industry practitioners with established experience in the fintech domain.

Who is the course for?

This course typically appeals to those who possess a level 8 qualification in any discipline and wish to transfer to a career in fintech.

Note that the course is technical in nature and entails a significant amount of independent study. Given the content and the timescale, students need to have a strong commitment to the course and a willingness to fully engage with the technical content.

This interdisciplinary course will appeal to graduates of finance, computing and business seeking to enter the area of fintech; and industry practitioners seeking to gain insightful experience and exposure to the principles of fintech, as well as data analytics and emerging technologies. Specifically,students would have opportunity to choose between two learning paths: programming learning path and non-programming learning path. In addition to the core modules, the programming learning path will offer subjects such as Machine Learning for Finance and Programming for Financial Data Science, while the non-programming learning path will offer modules such as Entrepreneurship and Innovation in Fintech, and Leadership, Organisation Culture and Human Factors in Fintech.

The programme aims to produce high-quality, technically competent, innovative graduates that will become leading practitioners in the field of Financial Technologies. Upon completion of this course, graduates will be able to:
• Synthesize and critically evaluate expert knowledge of governance and compliance, data analysis and visualisation, cybersecurity and IT auditing, big data analytics, high level as well as deep financial data analysis skills, adapting artificial intelligence and machine learning in fintech, techniques and technologies of fintech utilised in both technical and business contexts.
• Formulate, design, assess, and implement effective business and technical solutions and strategies for the fintech domain based on the latest industry practices and standards to enhance human potential and customer support.
• Contextualise and integrate future, emerging, and disruptive technologies in fintech.
• Critically assess and evaluate ethical, sustainable, and responsible risks and impacts associated with technological and strategic solutions in fintech domain. Demonstrate competencies in legal practices and regulations in fintech.
• Critically evaluate and optimise entrepreneurship, business, and technical strategies for the fintech domain. Acquire and develop a comprehensive skill set in leadership and collaboration in order to actualise entrepreneurship and innovation in fintech.

Career Prospects

The fintech industry is growing at a fast pace and the global Fintech-as-a-Service Market size is expected to reach $681.6 billion by 2028. Organisations such as Financial Services in Ireland – Skills of the Future, ICTSkillnet Report 2022, Expert Group on Future Skills Needs (EGFSN) have reported a huge market need for graduates with skills in finance and financial technologies in Ireland.

COURSE CONTENT

Core Modules
• Blockchain Technologies
• Financial Markets
• Data Governance, Ethics, and Sustainability
• AI for Finance
• Financial Regulations
• Payments and Transaction Services

In addition, there is the choice of two electives.

Elective Modules
• Programming for Financial Data Science
• Leadership, Organisational Culture, and Human
  Factors in Fintech
• Machine Learning for Finance
• Entrepreneurship and Innovation in Fintech

Research Elective
• Practicum
  or
• Internship

Elective modules are subject to availability and a minimum number of students required to run a module.

Note that there are dependencies between some electives. To study Machine Learning for Finance elective in semester 2, students must have studied Programming for Financial Data Science elective module in semester 1. However, all the students can elect to study Entrepreneurship and Innovation in Fintech module in semester 2.

Assessment
Assessment comprises various components, including continuous assessments (CA), project design assignments, and formal examinations. The specific format and weight of these assessments can vary significantly depending on the individual module. Please note that in some instances exams may take place in the daytime, evenings and at weekends.

Award and Progression
The Master of Science in Fintech is awarded by QQI at level 9 on the National Framework for Qualifications. Students who successfully complete this course may progress to a major award at level 10 on the NFQ, such as a PhD.

Entry Requirements
A level 8 degree (2.2 award) or its equivalent in one or more of the following domains: computer science, finance, business, or economics. Cognate disciplines will also be considered. Note that applicants lacking both a clear financial and technology component may still be eligible but are subject to review. The College operates a Recognition of Prior Experiential Learning (RPEL) scheme, meaning applicants who do not meet the normal and academic entry requirements, may be considered based on relevant work or other experience. Non-English-speaking applicants must demonstrate fluency in the English language as demonstrated by an IELTS academic score of at least 6.0 or equivalent.

Laptop Requirement
This programme has a BYOD (Bring Your Own Device) policy. Specifically, students are expected to successfully participate in lectures, laboratories and projects using a laptop computer with a substantial hardware configuration. A suitable configuration is 8GB of RAM (16GB are recommended); a modern 64-bit x86 processor (Intel i5 or superior); 250+ GB of available space in hard disk; WiFi card; and a recent version of Ubuntu, macOS or Windows.

It is the responsibility of the student to ensure their laptop is functioning correctly and that they have full administrator rights to the machine. NCI IT does not provide support for personal devices.

Some students may be able to avail of the Student Laptop Loan Scheme, subject to eligibility. See page 83 for more information.