

Professional Diploma in

Artificial Intelligence Models and Programming in Financial Services

2025—2026



A recognised
college of UCD

Who we are

IOB

IOB is a professional community of over 32,100 members who work in banking, funds and asset management and the international financial services sector. Professional development of our members through education is at the heart of what we do. IOB provides university programmes to enable our members achieve and sustain their professional qualifications and Continuing Professional Development (CPD) – essential in meeting customer and regulatory expectations.

Excellence in education – a recognised college of UCD

As a recognised college of UCD and the standout financial services industry educator, we offer qualifications of the highest standard. We currently offer more than 40 programmes ranging from Professional Certificates and Diplomas (level 7) on the National Framework of Qualifications (NFQ) to Masters Degrees (level 9). We design our programmes to be practical and relevant but grounded in academic rigour.

An exciting new programme supporting unique AI learning requirements in financial services



Strengthen technical
expertise to harness
AI efficiencies



Financial services



NFQ Level 9

Welcome

I am delighted to introduce you to the Professional Diploma in Artificial Intelligence Models and Programming for Financial Services, which was officially launched in October 2024 at the IOB Future of Finance Summit.

As AI comes more to the fore throughout the industry and is being adopted across banking, fintech, funds and the entire financial services sector, we at IOB are here to support the sector's education needs in this critical area, which is still only at the early stages of this transformation.

This programme will equip financial services professionals with the cutting-edge expertise required to make the most of this transformative technology.

The Professional Diploma in Artificial Intelligence Models and Programming for Financial Services is a level 9 UCD accredited programme designed for non-technical financial services leaders, helping you to unlock the full potential of AI and invest in skills that drive innovation, keep you ahead of the competition, and meet the ever-changing demands of your industry.

This programme will provide you with the knowledge and skills to:

- Understand what it takes to adopt AI and analytics tools and techniques
- Lead AI-driven projects that enhance your team's efficiency and strategic value.

The Professional Diploma in Artificial Intelligence Models and Programming for Financial Services is on the pathway to the **MSc in Financial Services**, which may be of interest if you would like to continue studying and are looking for a progression route to deepen your expertise.

I wish you every success with your studies and look forward to supporting you on your learning journey.

Margaret D'Arcy

Programme Director



Who is the programme for?

About the programme

The Professional Diploma in Artificial Intelligence Models and Programming in Financial Services is a level 9 UCD accredited programme designed for non-technical financial services professionals responsible for developing and implementing AI strategies who want to deepen their knowledge of AI models and the code which drives them. Unlock the full potential of AI and invest in skills that drive innovation, keep you ahead of the competition, and meet the ever-changing demands of your industry.

In particular, the programme will be of interest to:

- Professionals who lead AI-driven projects that enhance your team's efficiency and strategic value.
- Professionals wanting to build confidence to leverage AI technology and ensure that its integration supports both business and strategic outcomes.
- Professionals exploring AI models in financial services for fraud detection, risk management, and credit loss prediction while learning how to consider responsible, ethical and effective deployment of AI initiatives within your operations.

How you will benefit

On completing the Professional Diploma in Artificial Intelligence Models and Programming for Financial Services you will be expected to be able to:

- Describe and explain the terminology and core concepts and terms underpinning AI Models and Programming in Financial Services
- Select and use an appropriate programming language (Python, SQL) to design and build models for financial services applications
- Evaluate the theoretical foundations, practical applications, and ethical consideration of mathematical and statistical models in financial services, assessing their performance, effectiveness and limitations
- Communicate clearly and effectively model design development and its application to technical and non-technical stakeholders
- Identify and pursue appropriate learning opportunities (academic and non-academic) which enhance professional career ambitions and individual competencies and capabilities.

Curriculum

NFQ: Level 9

Academic credits: 30 ECTS

Modules: 3

Delivery: Online

Awarding body: UCD

The Professional Diploma in Artificial Intelligence Models and Programming for Financial Services is comprised of three modules as follows:

1. **AI and Analytics Models in Financial Services** (NFQ Level 9, 10 ECTS)
2. **SQL Programming** (NFQ Level 9, 10 ECTS)
3. **Python Programming** (NFQ Level 9, 10 ECTS)

1. AI and Analytics Models in Financial Services

Delves into various analytics and AI models used in financial services, covering model structures, scorecards, decision trees, credit loss models, fraud modelling, and risk management. In this module, you will:

- Learn the terminology and the core concepts and terms underpinning AI models and programming in financial services
- Place some theoretical foundations within the practical applications and the ethical considerations of what these mathematical and statistical models present to us.

2. SQL Programming

Develops advanced SQL programming skills, from database management and data retrieval to query optimisation and practical applications. In this module, you will:

- Learn new skills whereby you can leverage the essence of AI
- Understand the dialogue of AI.

3. Python programming

Aims to take Python novices to full proficiency, covering fundamental programming principles, data manipulation with Pandas, statistical calculations, data visualisation, and practical modelling projects. AI runs across multiple disciplines, but in essence AI is built on programming languages. In this module, you will:

- Build skills and competencies around the code that drives programming
- Gain knowledge of AI models in a Financial Services environment and the code that drives them.

Further Information

Programme Commencement

September 2025

Learning Supports

Learning supports are available from the start of the trimester from IOB Learn – your own online resource – which is accessible from iob.ie. You should check IOB Learn regularly for module news, study and workshop material and other resources.

Duration and Delivery

The programme is delivered online and it can be completed in 1 year (part-time).

It is strongly recommended that students attend all their scheduled online lectures. Details and schedules for the delivery for each module are set out in the study guides accompanying each module.

Assessment

100% continuous assessment.

The assessment is a combination of project work and continuous assessment. IOB programmes are largely delivered and assessed online. Students should ensure that they have appropriate equipment (laptop) and that appropriate software (including MS Office and Word) is available to them to participate in the programmes and related assessments.

Award

When you successfully complete this programme, you will be awarded a Professional Diploma in Artificial Intelligence Models and Programming for Financial Services from UCD.

This is a level 9 qualification on the National Framework of Qualifications.

Progression

This award is on the Pathway to MSc in Financial Services. Those wishing to continue their studies and achieve the MSc will receive the higher award only. To find out more, please visit iob.ie/programme/msc-financial-services

Entry requirements

The entry requirements for individuals seeking admission to the Professional Diploma in Artificial Intelligence Models and Programming for Financial Services are:

- An Honours degree (second class grade 2 award or higher) in business or cognate discipline (e.g. economics, accounting, information technology)

OR

- Admission may also be considered for experienced professionals who do not meet the admission requirements as set out above, where they can demonstrate knowledge through their work i.e., they have more than 5 years' experience in a management role (to be considered on a case-by-case basis).

Professional body membership

You must be a current member of IOB, or become a member, to apply for this programme.

Fees

The programme fee is €5,280 - (€1,760 per module).

How to apply

To apply online, please visit iob.ie/programme/ai-models

Contact us

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Your personalised learning platform and mobile app

Access exclusive content

Review the latest industry insights and thought leadership on financial services. Follow content channels in topics such as risk, compliance, digital innovation and ESG to stay up to date with sector trends and best practices.

Learn at your own pace

Learn at a time and pace that suits you with the full library of archived IOB events and webinars. IOB Learn is your ticket to the conversations that matter.

Explore your module and CPD resources

Find your module materials, resources and CPD content for professional designations on one dedicated platform.

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