# **National Apprenticeship - Occupational Profile**

Apprenticeship Title	International Financial Services Specialist (IFS Specialist)
NFQ Level	8
Duration	2 Years
Typical tasks/ responsibilities	Promote Ireland as a Location for International Financial Services & world class innovative products & services
	<ul> <li>Drive continuous improvement in the operating environment &amp;</li> </ul>

- competitiveness of Ireland's IFS sector
- Drive Research, Innovation & Entrepreneurship in the IFS sector, with a particular focus on financial technology & governance, risk & compliance
- Develop job-creation opportunities from emerging IFS sub-sectors & new markets
- A new implementation framework for IFS2020

Realising the growth potential of the IFS sector relies to a large extent on the availability of high quality skills that meet the needs of a sector that is facing both significant challenges and opportunities in an international context. The global trends that are shaping the IFS industry, including the disruptive changes being driven by ICT; Big Data; increased emphasis on risk, compliance and security; new business models, products and services; and the intensified global competition for FDI and for talent require concerted responses in terms of the supply of quality graduates, ongoing skills development, capacity for innovation and problem solving, and talent attraction. The IFS sector is competing with other sectors, including domestic FS employers and leading multinational corporations, for graduates in disciplines such as ICT, engineering, mathematics, data analytics, business and law. This competition for talent has been accentuated in more recent years as the convergence between ICT and IFS has accelerated.

On successful completion, the International Financial Services Specialist will:

### **IFS Specialisms**

There are a number of common global and domestic industry trends primarily driving the skills needs across the International Financial Services sector. These trends are driving IFS companies to refocus on growth which is creating a different type of skillset as they continue to move up the value chain. Three key specialist skills areas have been identified in consultation with the IFS sector via Financial Services Ireland which are evidenced in the IFS Skills Needs Analysis Report produced by the Summit Finuas Network partnered by Accenture in 2015:

- Data Analytics
- Fintech
- Regtech



# IFS Specialisms (cont'd)

These identified specialisms are key to growth across all of the IFS subsectors such as Fund and Asset Management, International Banking, Securitisation, International Insurance, Aviation Financing, Fintech (including Payments & Money Transfer), Corporate Treasury and Professional Services.

The IFS Specialist Occupational Profile needs to be flexible enough to react to global and national changes in the sector. For September 2016 it is proposed that specialisms of Data Analytics and Fintech be catered for because of current skills demands and for the specialism of Regtech to be developed for September 2017.

As the industry evolves other specialisms will be introduced based on sectoral demand and existing specialisms may be modified or eliminated again based on sectoral demand and market intelligence.

# IFS Specialist - Data Analyst

The primary role of a Data Analyst is to collect, organise and study data to provide business insight. Data analysts are typically involved with managing, cleansing, abstracting and aggregating data, and conducting a range of analytical studies on that data. They work across a variety of projects, providing technical data solutions to a range of stakeholders/customers issues. They document and report the results of data analysis activities making recommendations to improve business performance. They have a good understanding of data structures, database systems and procedures and the range of analytical tools used to undertake a range of different types of analyses.

### **Typical Job Roles:**

Data Analyst, Data Manager, Data Scientist, Data Modeller, Data Architect, Data Engineer

#### **Competencies**

#### **Technical Competencies:**

On completion of the Apprenticeship Award the IFS Specialist should be able to undertake the following in line with organisational procedures and under supervision:

- Identify, collect and migrate data to/from a range of internal and external systems
- Manipulate and link different data sets as required
- Interpret and apply the organisations data and information security standards, policies and procedures to data management activities
- Collect and compile data from different sources
- Perform database queries across multiple tables to extract data for analysis
- Perform routine statistical analyses and ad-hoc queries
- Use a range of analytical techniques such as data mining, time series forecasting and modelling techniques to identify and predict trends and patterns in data



# Competencies (cont'd).

- Assist production of performance dashboards and reports
- Assist with data quality checking and cleansing
- Apply the tools and techniques for data analysis, data visualisation and presentation
- Assist with the production of a range of ad-hoc and standard data analysis reports
- Summarise and present the results of data analysis to a range of stakeholders making recommendations
- Work with the organisation's data architecture

#### Knowledge

### **Technical Knowledge and Understanding:**

- Of the range of data protection and legal issues
- Of the data life cycle
- Of the different types of data, including open and public data, administrative data, and research data
- Of the differences between structured and unstructured data
- Of the fundamentals of data structures, database system design, implementation and maintenance
- Of the importance of the domain context for data analytics
- Of the quality issues that can arise with data and how to avoid and/ or resolve these
- Of the importance of clearly defining customer requirements for data analysis
- Of the processes and tools used for data integration
- Of the steps involved in carrying out routine data analysis tasks
- Of how to use and apply industry standard tools and methods for data analysis

## Skills

#### **Underpinning Skills, Attitudes and Behaviours:**

- Logical and creative thinking skills
- Analytical and problem solving skills
- Ability to work independently and to take responsibility
- Can use own initiative
- A thorough and organised approach
- Ability to work with a range of internal and external people
- Ability to communicate effectively in a variety of situations
- Maintain productive, professional and secure working environment
- Results Focus



Typical Activities that may be carried out by, but are not exclusive to this occupation include:

- Analyse client data requirements and ensure that data coverage meets client needs
- Locate, troubleshoot and resolve data issues
- Collaborate with developers to improve data quality and data coverage
- Take new clients through the on-boarding process and automate their data feed to the analytics engine ensuring a straight through processing model is established
- Maintain the input schema for our analytics platform working closely with Financial Engineers to define the data inputs are needed for each product type
- Change management for existing data connections to Fund administrators, custodians and portfolio managers
- Become a subject matter expert in the OTC pricing models on our platform and their associated data needs
- Work with Financial Engineering teams, product specialists and IT development staff to design and implement enhancements to the tools used to manage client data across the platform
- Responsible for developing, implementing, exploring the big data environment, and automating predictive analytical models leveraging available data assets and statistical analysis tool
- Provide support for mining data to identify behaviour patterns, predict trends, and forecast outcomes to support data driven decisions and drive change to reduce risk and increase efficiencies and insights. These analyses may involve a wide range of areas including: financial analysis (P), trade processing, cancel and corrects, open trades, etc.
- Manipulate data in structured (SQL) and unstructured (noSQL) forms and be required to analyze/model data using advanced statistical methods and implement algorithms needed to perform analyses
- Regular communication with business management to support projects, enhancements and exploratory requests. The analyst will participate in projects aligned with the company's strategic direction to identify and reduce risk/exposure

