

# CAREERS THROUGH MATHS: INVESTMENT ANALYST



Investment Analysts use mathematics to solve complex problems and drive innovation. (Image Source: Unsplash)

## JOB OVERVIEW

Investment Analysts are financial detectives who use quantitative analysis to evaluate investment opportunities and provide data-driven recommendations. They work for asset management firms, investment banks, hedge funds, and pension funds, where they research companies, industries, and economic trends. Their core responsibility is to determine the intrinsic value of assets—such as stocks, bonds, or real estate—by building complex financial models and forecasting future performance. This role is fundamentally mathematical, requiring a rigorous approach to interpreting financial data and assessing risk. The analyst's day-to-day work involves deep financial statement analysis, constructing discounted cash flow (DCF) models, and performing comparative company analysis. They synthesise vast amounts of numerical data to produce clear, concise reports that inform multi-million-pound investment decisions for portfolio managers or clients.

## KEY MATHS APPLICATIONS

**Primary Areas:**

## ESSENTIAL SKILLS & TOOLS

SKILL	APPLICATION
<b>**Microsoft Excel**</b>	Advanced functions for building and manipulating complex financial models and performing sensitivity analysis.
<b>**Programming (Python/R)**</b>	Automating data collection and analysis, performing statistical tests, and developing algorithmic trading strategies.
<b>**Bloomberg Terminal**</b>	Accessing real-time financial data, news, and analytics for market research and valuation benchmarking.
<b>**Financial Acumen**</b>	Interpreting accounting principles and corporate finance concepts to accurately assess a company's health.

## TYPICAL PATHWAY

A strong undergraduate degree (2:1 or higher) in a highly numerical subject like Finance, Economics, Mathematics, or Physics is typically essential. Many analysts enhance their qualifications by pursuing a Master's in Finance or the Chartered Financial Analyst (CFA) designation, which is highly regarded in the industry. Career progression often starts from an analytical role to a Senior Analyst, Associate, and eventually Portfolio Manager or Head of Research. Top UK feeder universities include the London School of Economics, Warwick, Oxford, and Cambridge.

## INDUSTRY DEMAND

Demand for skilled Investment Analysts remains strong in the UK, particularly in London, a global financial hub. While competition for top roles is fierce, professionals with strong quantitative and analytical skills are consistently sought after. The rise of quantitative finance and data-driven investing continues to create opportunities for those with expertise in programming and advanced statistical modelling. The UK financial services sector employs over 1 million people, with investment analysis being a core and growing function.

## REAL-WORLD IMPACT

Investment Analysts play a critical role in the efficient allocation of capital within the economy. Their research helps direct funds to the most promising companies, fostering innovation, economic growth, and job creation. For individual clients and institutions like pension funds, their work is fundamental to securing financial futures and generating the returns needed to meet long-term obligations.

QUICK FACTS

- **Growth:** Positive industry outlook
- **Career:** Professional role requiring analytical skills
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