



All About Finance with Data Analytics

This programme is designed to meet the growing demand for financial practitioners who are well-equipped with both core knowledge of the financial markets as well as skills in data analytics. Besides learning key financial theories and concepts such as assets valuation, portfolio management and risk management, students will be exposed to contemporary topics such as blockchain technology, big data, machine learning, fintech and cryptocurrencies.

In addition, students enrolled in this programme will learn programming languages like Python to perform data analysis and financial modelling. The overall aim of this programme is to equip students with both financial and data analytical skills and knowledge to succeed in today's data-driven world. It is no longer an option for financial practitioners to be equipped with data analytical skills — it's the new standard.

Accredited by:



Jimmy Tam

*Associate Professor,
Head of School,
Edinburgh Business School,
Heriot-Watt University Malaysia*

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A degree in Finance and Data Analytics puts you at the centre of two of the most in-demand skill areas in today's data-driven financial landscape. Employers

increasingly seek professionals who not only understand financial principles but can also interpret and apply data effectively. This programme stands out for its alignment with current industry demands by equipping students with strong fundamentals in financial knowledge and at the same time offering practical exposure to apply analytical tools. Students will learn to interpret complex data sets, forecast financial trends, and use cutting-edge tools to make strategic financial decisions. I highly recommend this programme to anyone passionate about securing a future-proof career in the financial industry.

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BSc (Hons) Finance with Data Analytics

KPT/JPS (N/0412/6/0061) (MQA/PA18349)07/30

Intake: September

Our Programme

The programme aims to allow students to:

- Be equipped with comprehensive knowledge, understanding and skills in finance and data analytics.
- Have strong analytical, critical-thinking, digital and numeracy skills to solve real problems in the financial industry.
- Demonstrate effective communication, teamworking, leadership, interpersonal and entrepreneurial skills while recognising the need to pursue lifelong learning for successful career development in the area of finance and data analytics.
- Adhere to the highest level of ethical and professional standards in the financial profession while staying committed to uphold sustainable and governance practices.

CORE AND OPTIONAL COURSES

YEAR 1

- Fundamentals of Finance
- Personal Finance and Investment Ethics
- The Economy
- Introduction to Programming 1
- Financial Markets Theory
- Statistical Techniques
- Data Science Life Cycle
- Database Management Systems

YEAR 2

- Mergers and Acquisitions
- Corporate Finance Theory
- Fundamentals of Financial Technology
- Knowledge Management
- Financial Derivatives
- Applied Financial Modelling in Python
- Business Research Methods

Optional - (Choose One):

- *Visual Analytics*
- *Managing Corporate Value*

YEAR 3

- International Bond and Currency Markets
- Data Mining and Machine Learning
- Accounting and Finance Dissertation 1
- Contemporary Issues in Finance
- Big Data Management
- Accounting and Finance Dissertation 2

Optional - Semester 1 (Choose One):

- *Global Business Analysis*
- *Risk Management and Derivatives Applications*
- *Case Studies in Financial Management*

Optional - Semester 2 (Choose One):

- *Banking*
- *Equity Markets and Fund Management*
- *Sustainable Change Management*

Note: Subject to change.

Skills Acquired

- Strong problem-solving, critical thinking and analytical skills
- Proficiency in programming
- Proficiency in statistical analysis
- Competency in applying data analytical and visualization tools
- Ability to evaluate investment opportunities and develop financial strategy
- Effective communication and strong teamwork capabilities

Career Opportunities

- Financial Analyst
- Credit Analyst
- Algorithmic Trader
- Financial Automation Specialist
- Investment Analyst
- Risk Analyst
- Corporate Financial Manager
- Financial Data Scientist
- Financial Consultant
- Fund Manager



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