

wbs projects

At Warwick Business School we offer companies a comprehensive range of services and opportunities designed to help you achieve your recruitment and engagement needs.

If you are looking to recruit a student for a project or internship, advertise available positions, or meet our talented and ambitious participants, our experienced and dedicated WBS CareersPlus team are happy to meet with you. We can visit you at your place of work or invite you to campus to discuss which opportunities are right for you and your organisation.

Presented below is a summary of our activities throughout the year. If the options listed don't meet your needs, please do let us know – we are always working to develop new and innovative ways of engaging with companies.

- ☸ Campus Presentations
- ☸ Employer Treks
- ☸ MBA Profile Book
- ☸ CV Database & Job Board
- ☸ Consultancy Projects
- ☸ MBA Development & Mock Assessment Centres
- ☸ Sector Insight events & Panel Debates
- ☸ Guest Lectures

Please do get in touch if you would like to discuss or find out more about how you could engage with us.

- 🌐 wbs.ac.uk/go/recruitment
- ☎ +44 (0)24 7657 4862
- ✉ recruit@wbs.ac.uk

Through working with Warwick MBA students, we have been able to sharpen up our fundraising approach and implement new ideas, particularly around contact relationship management and leveraging our existing network of corporate contacts. The tactical fundraising plan across pharmaceutical, low carbon, wireless and energy sectors generated five new leads which we are pursuing. The strategy also confirmed some of our current thinking around future market opportunities. We found the calibre of WBS students to be extremely high and I have no hesitation in recommending other organisations to get involved with WBS.

Dr Andrew Cave
Chief Executive,
The Smallpeice Trust



Why choose our students for your project

Being an internationally renowned business school, our combination of world-class academics and leading-edge research means we attract the very best students.

We are globally accredited and were ranked in the world's top 30 business schools by the *Financial Times* in 2012.

Consultancy projects undertaken by Masters students and participants on the Warwick MBA are just one of the ways in which we work with our corporate partners and help you resolve real business issues.

If you have a strategic business requirement, our students could work with you on a consultancy project which would provide:

- ⌘ High quality analysis and solutions for your business concerns
- ⌘ Additional resources to solve your business issues
- ⌘ The opportunity to road test candidates for longer term positions
- ⌘ The introduction of cutting edge management thinking.

If you would like to know more about our consultancy projects we'd love to hear from you.

- W wbs.ac.uk/go/recruitment
- T +44 (0)24 7657 4862
- E recruit@wbs.ac.uk

Our academic expertise

We can offer you our expertise across many areas of business.

- ⌘ Brand management
- ⌘ Change management
- ⌘ Corporate social responsibility
- ⌘ Digital marketing
- ⌘ Econometric forecasting
- ⌘ Financial modelling
- ⌘ Globalisation
- ⌘ Human resources
- ⌘ International marketing
- ⌘ Knowledge management
- ⌘ Management decision making
- ⌘ Management information systems
- ⌘ Marketing strategy
- ⌘ Operations management
- ⌘ Organisational behaviour
- ⌘ Organisational performance management
- ⌘ Scenario planning
- ⌘ Service management
- ⌘ Simulation
- ⌘ Statistical modelling
- ⌘ Strategic analysis
- ⌘ Strategy
- ⌘ Supply chain management
- ⌘ Technology management.

I have conducted research on Warwick Business School's consulting projects which shows that they develop highly-valued skills for both employers and participants alike. Initiative, leadership, oral communication, risk taking and decision making are just some examples.

It is rewarding to find that both the project sponsor and our students benefit greatly from this engagement. Not only is there a value-added benefit to the sponsoring organisation but there is also substantial skill development that is a plus to the graduate and the future employer.

Dr Scott Dacko
Associate Professor of
Marketing & Strategic
Management



WBS has an excellent reputation amongst employers and offers extensive networking opportunities. Almost every evening company presentations and Warwick specific events were held on and around campus, some of which were specifically tailored to the course I was studying. After interviewing with a number of companies I secured an external project as part of my course which led to a fantastic four months working for Barclaycard. This cumulated in a number of presentations, a management report and my dissertation – an experience which gave me the confidence to apply for my current position within the organisation – something I feel would not have been possible before WBS.

I learnt a lot through modules such as Spreadsheet Modelling and Advanced Data Analysis, which put the emphasis on using software packages such as Microsoft Excel and SPSS. The techniques and thought processes acquired as a result are directly applicable to a large number of careers, as is the extensive practice I had in writing reports and giving presentations. Ultimately, WBS improved my career prospects and gave me an amazing student experience.

Timothy Le
MSc (Management Science
& Operational Research)
Lead Data Analyst, Barclaycard



How does it work?

Our project process is very much a collaboration between us, you, and the student. This ensures all parties get the most out of the endeavour.

Project brief

First, we'll discuss your project ideas and what you want to achieve. Then we'll work with you to define your project brief. We'll help you specify your project scope and the deliverables which could include:

- ❑ a management report
- ❑ a presentation of the consultancy project outcomes
- ❑ a simulation model
- ❑ a research document
- ❑ a practical project plan that you can implement
- ❑ strategy implementation.

You may need an individual student to do a piece of practical work on site with you, or perhaps want to commission a piece of research.

Student selection

Next we'll suggest which type of candidates would be suitable to undertake the work. Sometimes there is crossover between courses, other times it is a discrete project which falls clearly within one course. We'll then advertise your project and help you to select the right candidate. Some organisations select from the applications submitted and some interview on campus. We can also assist with shortlisting, scheduling interviews, contacting applicants, and booking interview rooms for you.

Your commitment

Your level of involvement will be defined at the planning stage. Some organisations want their candidate to be based in their offices while others prefer them only to visit as necessary. Contact time varies depending on the nature of the project so it is essential that you clearly define the scope of the project and set realistic expectations with your candidates regarding contact time.

We would recommend that you nominate a named contact within your organisation to take an overview of the project, and a mentor can also be useful. You may also need to initiate the collection or purchase of data and, where appropriate, arrange office accommodation, depending on the nature of your project.

Timescales

Most project work takes place over the summer months and lasts for 10–12 weeks.

Confidentiality

Your student will base their dissertation on the project they have undertaken. Any information from the project that might be included in this is treated as strictly confidential.

The summer internship & consultancy project with PepsiCo provided the perfect platform to apply the theory learned during the course. It gave my prospective employer the opportunity to assess my capabilities and skills, and gave me the chance to work on two high profile 'live' business projects.

Balraj Bapodra MBA (Warwick)
Online Business Manager,
PepsiCo



PEPSICO

Participating organisations

A wide range of organisations across a diverse range of industry sectors, including charities, small enterprises, and international blue chip companies have benefited from our projects.

- ❑ 3i
- ❑ The AA
- ❑ Accenture
- ❑ Aldemore Bank
- ❑ Alliance & Leicester
- ❑ AOM International
- ❑ Amazon
- ❑ Asset Management Consulting
- ❑ Balfour Beatty
- ❑ Bank of England
- ❑ Bank of India
- ❑ Bank of Scotland
- ❑ Barclaycard
- ❑ Barclays Capital
- ❑ Barnardo's
- ❑ Birmingham Children's Hospital
- ❑ BP
- ❑ British Airways
- ❑ British Gas
- ❑ British Heart Foundation
- ❑ BT
- ❑ Burberry
- ❑ Capgemini
- ❑ Centrica
- ❑ Circadian Solar
- ❑ Cisco Systems
- ❑ Clearspring
- ❑ ConocoPhillips
- ❑ Coventry City Council
- ❑ Credit Suisse
- ❑ Credos
- ❑ Deloitte
- ❑ Department for Work & Pensions
- ❑ Deutsche Post DHL
- ❑ Duff & Phelps
- ❑ The Duke of Edinburgh's Award
- ❑ E.ON
- ❑ Ernst & Young
- ❑ Financial Services Authority
- ❑ Ford
- ❑ GE Healthcare
- ❑ Guide Dogs for the Blind Association
- ❑ Hackney Borough Council
- ❑ Hamleys
- ❑ The Home Office
- ❑ HSBC
- ❑ IBM
- ❑ Impellam Group
- ❑ Intel
- ❑ JH Richards & Co.
- ❑ JP Morgan
- ❑ Jaguar Land Rover
- ❑ Johnson & Johnson
- ❑ Kimberly-Clark
- ❑ KPMG
- ❑ Leicestershire Police
- ❑ Lisbon International Airport
- ❑ Lloyds Banking Group
- ❑ LVMH Moët Hennessy – Louis Vuitton
- ❑ Merz Group
- ❑ Metropolitan Police Service
- ❑ National Audit Office
- ❑ National Express
- ❑ National Grid
- ❑ National Trust
- ❑ Nestlé Nespresso
- ❑ Next
- ❑ The Nielsen Company
- ❑ The Numerical Algorithms Group
- ❑ Old Mutual
- ❑ Oresys
- ❑ Oriflame
- ❑ Penso Consulting
- ❑ Pentland Brands
- ❑ PepsiCo
- ❑ Pfizer
- ❑ Procter & Gamble
- ❑ The Professional Golfers' Association
- ❑ PZ Cussons
- ❑ Radisson Hotels
- ❑ The Random House Group
- ❑ Rolls-Royce
- ❑ Royal Bank of Scotland
- ❑ RWE npower
- ❑ Santander
- ❑ SchellingPoint
- ❑ Searchlight Consulting
- ❑ Siemens
- ❑ The Smallpeice Trust
- ❑ Sony Ericsson
- ❑ Tata Steel
- ❑ Tesco
- ❑ Top Service
- ❑ Virgin Media
- ❑ Volkswagen
- ❑ Volumatic
- ❑ Volvo
- ❑ Warwickshire County Council

Virgin Media operate in an exciting, fast-paced and competitive industry leading to constantly changing business priorities, and the Business Intelligence department sits right in the middle of that.

Over the past three years we have taken on 11 excellent WBS students to carry out challenging and relevant projects. These have involved a mixture of statistical and analytical work, feasibility studies, application development and business engagement and have always been focused on solving important, real-life problems that have a serious impact on company performance.

We have been impressed with the performance, professionalism and analytical ability of the students we have taken on and every one of them have continued employment with us and have progressed within the department.

These projects have been a great way for the students to integrate into a business environment and at the same time deliver value to the company.

Lasse Pedersen,
Head of Analytical Solutions
Virgin Media Business
Intelligence



Projects for the Warwick MBA

Overview

The Warwick MBA is a broad based management qualification, attracting experienced managers from around the world. Our programme is research-led which guarantees our participants explore the latest theories and models with our academics.

While being academically rigorous the study programme is strongly grounded in practice. Participants use case studies and classroom discussion to explore key business ideas in relation to reality.

They undertake two projects during their studies:

- ✚ an individual external project for an organisation of their choice which could cover any area of business
- ✚ a group project for a 'third sector' organisation as part of the Practice of Management module.

For more information about the Warwick MBA

🌐 warwickmba.com

Study programme

Seven core modules are taken by all participants; they then choose six elective modules.

Core modules

Students on the Warwick MBA learn to appreciate managing in a new world, the politics of business and professional requirements across all industry sectors and functions.

Core modules

- ✚ Accounting & Financial Management
- ✚ Business, Politics, & Society
- ✚ Managing in a New World
- ✚ Marketing
- ✚ Operations Management
- ✚ Organisational Behaviour
- ✚ Strategic Advantage: double module

Elective modules

- ✚ Advanced Corporate Finance
- ✚ Behavioural Sciences for the Manager
- ✚ Business and Corporate Taxation in Europe
- ✚ Business in Society – the roles & responsibilities of global business
- ✚ Company Valuation
- ✚ Consumer Behaviour
- ✚ Consumer Behaviour & Market Research Techniques
- ✚ Corporate Finance
- ✚ Corporate Governance
- ✚ Corporate Mergers & Restructuring in the US & Europe
- ✚ Cross-Cultural Management
- ✚ E-business & IT Entrepreneurship
- ✚ European Business Law
- ✚ European Taxation
- ✚ Entrepreneurial Finance
- ✚ Entrepreneurship & New Venture Creation
- ✚ Global Branding
- ✚ Fundamentals of Information Systems
- ✚ Global Information & Process Management
- ✚ Human Resource Management
- ✚ International Business
- ✚ International Marketing
- ✚ Investments & Risk Management
- ✚ Leadership & the Art of Judgement
- ✚ Management of Change
- ✚ Management Decision Making
- ✚ Managing the Digital Workplace
- ✚ Marketing Through Social Media
- ✚ Negotiation
- ✚ Non-Profit Management
- ✚ Operations Strategy

- ✚ Psychology of Investing & Financial Decisions
- ✚ Responsible Business Negotiation
- ✚ Service Management
- ✚ Service Management
- ✚ Strategic Leadership
- ✚ Strategic Marketing
- ✚ Supply Chain Management

Projects for the Warwick MBA

The individual project is a fundamental part of our programme and forms the basis of a participant's dissertation. All projects are supervised by one of our leading academics, and are undertaken over the summer months immediately after completion of our study programme. Work can be based on your company premises or undertaken from campus.

Previous projects

Previous project topic areas have included marketing, strategic management, information technology, change management, supply chain management, outsourcing, risk analysis, investigating the viability of new markets, and innovation management.

- ▣ Measuring supply chain performance
- ▣ The globalisation of markets: Implications for the food and beverage industries
- ▣ Using social networking to recruit and develop a direct sales force
- ▣ Social enterprises and the drive for sustainability
- ▣ Devising, formulating, and implementing a strategic marketing communications plan
- ▣ Activity-based country cost model for a logistics company
- ▣ New product entry strategies
- ▣ Strategic outsourcing in the SME and non-profit sectors
- ▣ Risk and expected return in a project portfolio within renewable energy

Timescales

Most projects are undertaken between July and September and last up to 12 weeks. Please see the diagram below for project timescales from beginning to end.

Projects for the Warwick MBA	September	October	November	December	January	February	March	April	May	June	July	August	September
Project sourcing	●	●	●	●	●	●	●	●	●				
Define and agree project brief			●	●	●	●	●	●	●				
Advertise projects to students					●	●	●	●	●				
Review applications / interview and select students						●	●	●	●	●			
Project work is undertaken											●	●	●
Project outcomes are presented to client in a report and / or presentation													●

We are so pleased that WBS provided us with a participant from the Warwick MBA.

His approach was both enthusiastic and thorough, and the final presentation he provided was very professional – convincing and easy to understand.

Sponsoring a project was a great opportunity to view our product objectively, from outside our company. We will definitely keep in touch with him to let him know how we implement his research and its results.

I would like to thank WBS for giving us such a great opportunity, and highly recommend this practice to other organisations.

Yoshie Prideaux
Personal Assistant
Clearspring

Clearspring

Projects for MSc courses

A number of our MSc courses require students to undertake an individual project as an integral part of their learning. All projects are supervised by a leading WBS academic. Projects are undertaken at the end of the taught part of the Masters course over the summer months, typically from June to September. Students can be based at your company premises or work from campus.

For more information about our Masters courses

wbs.ac.uk/go/masters

Our projects are offered across a wide range of disciplines, including:

- ▣ MSc Business Analytics & Consulting
- ▣ MSc Management Science & Operational Research
- ▣ MSc Finance
- ▣ MSc Finance & Economics
- ▣ MSc Financial Mathematics
- ▣ MSc Information Systems Management & Innovation
- ▣ MSc Marketing & Strategy.

Timescales

Most projects are undertaken between June and August and last between 10 to 12 weeks. Please see the diagram below.

Our sponsored students provided us with a significant piece of work that was of both high academic standard and practical use. It helped us develop our brands' strategies in Russia and find the right partners. The students' presentation to the Executive Team was very professional and the unanimous response was that we should do more of this in future.

Ollie Smith
Head of Insight
Pentland Brands



Projects for MSc courses	September	October	November	December	January	February	March	April	May	June	July	August	September
Project sourcing	•	•	•	•	•	•	•	•					
Define and agree project brief						•	•	•					
Advertise projects to students							•	•	•				
Review applications / interview and select students							•	•	•				
Project work is undertaken										•	•	•	
Project outcomes are presented to client in a report and / or presentation												•	•

Projects for our MSc Business Analytics & Consulting MSc Management Science & Operational Research

Overview

There is some crossover between the two courses, with a shared core curriculum and some electives available to both courses. For both, the individual project is a fundamental part and forms the basis of a student's dissertation. All projects are supervised by one of our leading academics, and are undertaken over the summer months immediately after completion of our study programme. Students can be based on your company premises or work from campus.

MSc in Business Analytics & Consulting

This course attracts students looking for a client focused career in business analytics. They will be considering career paths including management consultancy and business analysis, in areas such as business strategy and policy development, organisational performance, and market analytics.

MSc in Management Science & Operational Research

This course is very technical and attracts those who like to analyse complex problems and want to improve decision-making processes. They are adept at dealing with operational research, statistics, information technology, and general management and enjoy selecting the right technical approach for different problems.

Educational background

Our MSc in Business Analytics & Consulting students have a wide range of first degrees including social sciences, engineering, and occasionally arts graduates with a strong analytical ability.

Our MSc in Management Science & Operational Research students must have had some training in mathematics at A-level or above, eg an undergraduate statistics module. Typically students have a first degree in mathematics, statistics, or natural sciences.

Example projects

Previous project topic areas have included business planning, problem structuring, performance measurement and efficiency analysis, management systems, systems modelling, risk analysis, budgeting, and improving strategy and decision making processes. Titles include:

- ❑ Public sector supply chains for a global logistics organisation
- ❑ Marketing performance analysis for a leading media company
- ❑ Capacity planning using simulation for a quality control organisation
- ❑ Modelling cancer using the Wanless 'Fully Engaged' scenario for a healthcare provider
- ❑ Bias identification in online survey data for a mobile telecommunications company
- ❑ Factors affecting icing when tankering fuel for a leading airline
- ❑ Analysis of short-term sales forecasting for a UK based scales and weighing manufacturer.

Study programme

Students on our MSc in Business Analytics & Consulting take five core and five elective modules. Students on our MSc in Management Science & Operational Research take eight core and two elective modules.

Common core modules

- ❑ Consulting on Complex problems
- ❑ Business Statistics
- ❑ Foundations of Management
- ❑ Operational Research Modelling
- ❑ Spreadsheet Modelling

Further core modules for our MSc in Management Science & Operational Research

- ❑ Advanced Data Analysis
- ❑ Mathematical Programming & Heuristics
- ❑ Simulation Methods

Elective modules

Students then tailor their studies by choosing elective modules, all of which are open to our MSc in Business Analytics & Consulting students but only some of which are open to our *MSc in Management Science & Operational Research students.

- ❑ Analytics in Practice
- ❑ Advanced Data Analysis
- ❑ Decision Analysis Consulting*
- ❑ Financial Analysis for Management
- ❑ Forecasting*
- ❑ Simulation Methods
- ❑ Strategy Analytics
- ❑ Text Analytics.

AOM International brings clients the best practical applications of world class service operations management. Working with WBS has enabled us to carry out some genuinely ground-breaking research that will greatly benefit our clients.

In the past two years we have had three students look at aspects of Contact Centre operations using sophisticated modelling techniques. This has added a theoretical underpinning to work we have carried out in the field, and we are now confident we can help contact centres achieve 20-40 percent improvements in efficiency as a result of this research.

WBS has also helped us with our own CRM methods, designing benchmarking tools that will enable our clients to achieve new insights from using our capacity planning tools.

We are delighted with our partnership with WBS and will continue to use their Masters students for projects in the future.

Neil Bentley
Managing Director,
AOM International



Projects for our MSc Finance

Overview

Our MSc in Finance prepares students for a wide range of careers in Investment Management or Corporate Finance. As the UK's number 1 pure finance masters (*Financial Times*), the course is traditionally very heavily oversubscribed, so we always have excellent students.

The individual project is a fundamental part of the course and forms the basis of a student's dissertation. All projects are supervised by one of our leading academics, and are undertaken over the summer months immediately after completion of our study programme. Students can be based on your company premises or work from campus.

CFA Program Partner

We are one of only 14 UK business schools to be awarded CFA Program Partner status which means that our course is recognised and acknowledged as providing professional excellence to the global investment community. Students who complete it have explored the concepts and principles that practitioners around the world have deemed integral to global practice.



Educational background

We accept students with first degrees in relevant subjects, such as accounting, finance, economics, business administration, engineering, or science. All students have achieved a good standard in mathematics, economics, and statistics or econometrics at undergraduate level.

Core modules

- ❑ Asset Pricing
- ❑ Foundations of Corporate Finance
- ❑ Quantitative Methods for Finance
- ❑ Economics of Financial Markets
- ❑ Empirical Finance

Elective modules

Students choose three elective modules from the selection below:

- ❑ Advanced Corporate Finance
- ❑ Alternative Investments
- ❑ Behavioural Finance
- ❑ Big Data Analytics
- ❑ Corporate Governance
- ❑ Derivative Securities
- ❑ Financial Engineering
- ❑ Financial Reporting & Statement Analysis
- ❑ Financial Risk Management
- ❑ Financial Software & its Development
- ❑ Fixed Income & Credit Risk
- ❑ International Financial Management
- ❑ International Financial Markets
- ❑ Investment Management
- ❑ Judgement & Decision-making.

Example projects

Previous project topic areas have included financial and statistical analysis, pricing, modelling, forecasting, risk and investment management, corporate finance, and quantitative trading.

Titles include:

- ❑ Testing UIP: Do changes in interest rate expectations account for exchange rate movements
- ❑ Asset allocation and Signal Selection
- ❑ Develop and evaluate asset allocation strategies for the inclusion of alternative asset classes, ie oil, gold, commercial property, hedge funds beyond equity and bonds.
- ❑ Develop and evaluate market timing indicators – when to enter/exit the market – based on observable criteria.
- ❑ Sector selection – factors that influence sector performance in a multifactor model.
- ❑ Measures of earnings quality: influence on the predictability of future earnings, evidence for investor under-reaction to information on quality (eg in the earnings season) and potential strategies that can result.
- ❑ Carry out a study on a proprietary data set of industry and country level equity flow data, to explore its forecasting power in predicting country/ industry returns.

This year, we supervised a student working on risk within the energy sector. They provided valuable ideas for improvements to our current techniques and a welcome external perspective.

We found the interaction to be greatly rewarding, the dissertation has added an extra dimension to ongoing work in this area and during the regular project discussions we found our student to be knowledgeable, enthusiastic, and well prepared.

Andrew Shaw
Head of Analysis and Modelling,
RWE npower



Projects for our MSc Finance & Economics

Overview

Our MSc in Finance & Economics attracts students with a strong economics background, who are highly numerate, and want to learn to apply their knowledge to finance to open up their career options. They will be considering jobs in the City or in the capital, in areas such as asset management, corporate finance, trading, financial regulation, economic and financial consulting, and central banking.

The individual project is a fundamental part of the course and forms the basis of a student's dissertation. All projects are supervised by one of our leading academics, and are undertaken over the summer months immediately after completion of our study programme. Students can be based on your company premises or work on campus.

Educational background

All students have a first degree in economics or with a substantial economics component, having studied micro and macro economic theory. They are competent in calculus and statistics and have achieved a good standard in mathematics and/or econometrics in their first degree.

CFA Program Partner

We are one of only 14 UK business schools to be awarded CFA Program Partner status which means that our course is recognised and acknowledged as providing professional excellence to the global investment community. Students who complete it have explored the concepts and principles that practitioners around the world have deemed integral to global practice.



Core modules

Students study the following core modules:

- ⌘ Asset Pricing
- ⌘ Foundations of Corporate Finance
- ⌘ Microeconomics
- ⌘ Macroeconomics
- ⌘ Econometrics
- ⌘ Empirical Finance.

Elective modules

They also choose two electives from the list below:

- ⌘ Advanced Corporate Finance
- ⌘ Alternative Investments
- ⌘ Behavioural Finance
- ⌘ Big Data Analytics
- ⌘ Derivative Securities
- ⌘ Financial Engineering
- ⌘ Financial Reporting and Statement Analysis
- ⌘ Financial Risk Management
- ⌘ Financial Software & its Development
- ⌘ Fixed Income and Credit Risk
- ⌘ International Financial Management
- ⌘ International Financial Markets
- ⌘ Investment Management
- ⌘ Judgement & Decision-making.

They may also choose an elective module from the Department of Economics. The most popular electives are shown below:

- ⌘ International Monetary Economics
- ⌘ Topics in Global Finance.

We have supervised WBS Masters students for the last two years. The projects have consisted of exploring the information content of new datasets, in the context of forecasting stock returns. The results and dissertations produced by the students have been useful to us in assessing the potential benefit of further research in that direction.

All the students have been very bright, highly motivated, and very capable of conducting empirical research independently. Regular meetings throughout the summer help to steer the projects in a direction that is useful to us. But at the same time, there is plenty of scope for the students to add value to the projects by inputting their own ideas, and applying their knowledge on the latest techniques in academic research.

Amadeo Alentorn
Head of Quantitative Research
Old Mutual Asset Managers
(UK) Ltd



Projects for our MSc Financial Mathematics

Overview

Our MSc in Financial Mathematics combines finance and mathematics at a high level to prepare students for a career using sophisticated technical financial tools within financial engineering, risk management, and the most highly quantitative roles.

The individual project is a fundamental part of the course and forms the basis of a student's dissertation. All projects are supervised by one of our leading academics, and are undertaken over the summer months immediately after completion of our study programme.

Students can be based on your company premises or work on campus.

Educational background

All our students have a very strong mathematical background. Most have a degree in mathematics, engineering, physics, or statistics and we test mathematical ability at the start of the course.

Core modules

Students study the following core modules:

- ✚ C++ Modelling in Asset Pricing
- ✚ Continuous Time Finance for Interest Rate Models
- ✚ Derivative Securities
- ✚ Numerical Methods and Programming
- ✚ Probability and Stochastic Processes.

Elective modules

They also choose three electives from:

- ✚ Behavioural Finance
- ✚ Empirical Finance
- ✚ Financial Engineering
- ✚ Financial Risk Management
- ✚ Financial Time Series
- ✚ Fixed Income & Credit Risk
- ✚ Investment Management
- ✚ Partial Differential Equations.

Example projects

Previous project topic areas have included financial and statistical analysis, pricing, modelling, forecasting, risk and investment management, corporate finance, and quantitative trading.

Titles include:

- ✚ Propose a Rolling Intrinsic Valuation Method for Storage and Options on Storage for an international oil company
- ✚ Develop a Hedging Framework for a portfolio of assets using standardised contracts for an investment management company
- ✚ Examine the Applications of Filters, No Arbitrage and Finite Variation for a global asset manager
- ✚ Undertake a comparison of alternative interpolation methods for ensuring arbitrage free pricing in the base correlation model for a leading financial services firm
- ✚ Investigate market risk measurement of Interest Rate options smile/skew risk for a worldwide banking group
- ✚ The persistence and drivers of basis in the CDX and iTraxx index swap markets – what are the drivers, how to model them and the consistency of index basis with CDS-bond basis
- ✚ How will the introduction of a central clearing counterparty impact the incidence and distribution of counterparty risk?
- ✚ Model risk framework arising from Exotic interest rate and FX derivatives for a high street bank
- ✚ Conduct a literature review of Bayesian methodology currently being applied in finance and the implementation of one of the currently used models to a suitable dataset for a mathematical and statistical software company.

We find that student projects with WBS bring in new ideas from the field of financial applications that we would not be able to generate internally. They have been used to investigate new areas of functionality for our software products and to provide an independent viewpoint on possible improvements. Most importantly, the students stimulate and challenge our existing thinking and play a part in driving innovation within the company.

Dr Robert Tong
Technical Consultant
The Numerical Algorithms
Group Ltd

The logo for The Numerical Algorithms Group (nag) features the lowercase letters 'nag' in a bold, blue, sans-serif font. A registered trademark symbol (®) is positioned to the upper right of the 'g'.

Projects for our MSc Information Systems Management & Innovation

Overview

Our MSc in Information Systems Management & Innovation attracts students looking for a career in management or IT consultancy. They want to help organisations use ICT intelligently and creatively to achieve competitive business advantage.

The individual project is a fundamental part of the course and forms the basis of a student's dissertation. All projects are supervised by one of our leading academics, and are undertaken over the summer months immediately after completion of our study programme.

Students can be based at your company premises, where a supervisor can visit at least twice, or work from elsewhere.

Educational background

We accept students from a broad range of disciplines, who appreciate that ICT is an integral part of the management of global organisations. They are not required to have prior knowledge of IT as this course is not designed as a 'tools and techniques' course, but one which develops management and consulting skills and encourages critical thinking about issues outside narrow technological boundaries.

Study programme

Students follow a set curriculum ensuring a thorough grounding in key areas.

- ⌘ Data and Business Intelligence
- ⌘ Digital Business and Workplace Technologies
- ⌘ Digital Business Strategy and Social Media
- ⌘ Enterprise Systems Development
- ⌘ Global Sourcing and Innovation
- ⌘ Information Systems Consultancy
- ⌘ Knowledge Innovation and Change
- ⌘ Organisational Analysis.

Example projects

Previous project topic areas have included project implementation and management, innovation processes, IT strategy, information systems and architecture, IS security, customer relationship management, the management of global teams and virtual work practices, the creation and exploitation of business knowledge, and outsourcing and offshoring. Titles include:

- ⌘ Strategic review of ERP systems for a UK based scales and weighing manufacturer
- ⌘ Assessing the IT outsourcing maturity of organisations at an international IT organisation
- ⌘ Enterprise Information Architecture for a London Borough Council
- ⌘ Applications rationalisation for a City Council
- ⌘ Mobile communications and remote data transfer options for a not-for-profit environmental agency.

We have engaged WBS students since 2009. This year our project comprised research and recommendations on Software Asset Management processes and system tools to improve the management of our software estate. This was key to the insourcing of our ICT support operation.

All parties benefit from the academic support provided which guides the students in the practical application of the models and theories they've learned, and their use in real business situations.

Bev Messinger
Director of Customer & Workforce Services
Coventry City Council



Projects for our MSc Marketing & Strategy

Overview

Our MSc in Marketing & Strategy is highly unusual in combining these two elements. Our students gain a grounding in how marketing can drive a business as opposed to simply supporting it. They will be seeking a career in marketing, strategic management, brand management, or business planning.

The individual project is a fundamental part of the course and forms the basis of a student's dissertation. All projects are supervised by one of our leading academics, and are undertaken over the summer months immediately after completion of our study programme. Students can be based at your company premises or on campus.

Educational background

Our students have a business-related or social science undergraduate degree with marketing or strategy components, or relevant post-graduate experience.

Core modules

Six core modules are taken by all students, they then choose three elective modules.

- ⌘ Issues in Marketing: Theory & Practice
- ⌘ Issues in Strategy: Theory & Practice
- ⌘ Research Methods for Marketing & Strategy
- ⌘ The Environment of Business
- ⌘ Advanced Marketing Management
- ⌘ Advanced Strategic Management

Elective modules

- ⌘ Dynamics of Strategy
- ⌘ Global Branding
- ⌘ Global Business Strategy
- ⌘ Marketing Communications
- ⌘ Marketing through Social Media
- ⌘ Service Science: Innovation, Strategy and Marketing
- ⌘ Strategic Brand Management
- ⌘ Strategy in Practice
- ⌘ The Psychological Foundations of New Products and Technologies.

Example projects

Projects undertaken by our students are related to marketing or strategic management. These can range in perspective from quite broadly-defined problems, to very specific detailed issues.

Previous titles include:

- ⌘ Marketing to the UK public sector – a fresh approach for a growing business
- ⌘ An assessment of the possible impacts of technological developments over the next 3–5 years for e-marketing in insurance
- ⌘ Maximising the long-term potential for two brands in Eastern Europe
- ⌘ Do people 'blink' in business: marketing in the B2B arena and how rational and emotional factors impact decisions
- ⌘ Understanding the consumer behaviour of what, when, why, and how of purchase decisions in relation to marketing to the ethnic population
- ⌘ Where to next? Expanding the organisation in a world of international opportunities
- ⌘ True costs of communication inefficiencies within the value stream
- ⌘ Environmental performance and business success
- ⌘ Social media and b2b: what is the potential for social media to increase profitability and market share?

We had a WBS student carry out a research project for us as part of her Masters degree. She produced a very robust piece of work which resulted in tangible improvements to our business.

We have been involved with WBS projects for the past five years and have always been impressed with the calibre of the students and the benefits that their projects bring to our business.

Lisa Cardus
Managing Director,
Top Service Ltd



Photography by Samuel Kirby.

WBS believes this document is accurate, but accepts no liability for errors or later changes. See our web site for the latest information.

WBS CareersPlus
Warwick Business School
The University of Warwick
Coventry CV4 7AL UK

☎ +44 (0)24 7657 4862
✉ recruit@wbs.ac.uk
🌐 wbs.ac.uk/go/recruitment

Designed in-house at WBS
[3530]

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WARWICK