



THE BUSINESS SCHOOL FOR FINANCIAL MARKETS  
[www.icmacentre.ac.uk](http://www.icmacentre.ac.uk)



# BSc Finance and Investment Banking

YOUR COURSE TO SUCCESS.  
YOUR ICMA CENTRE.



# Welcome to the ICMA Centre



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“The great thing about the ICMA Centre is that many of the faculty work or have worked in industry meaning you are learning both the academic and practical side of how the markets really work. **It’s been a great experience, I enjoyed every year at the ICMA Centre** and I gained really valuable skills and experience.”

Eva Sajbenova | Class of 2007 | PwC, London



Europe's first active collaboration between the securities industry and a University finance department began eighteen years ago when the International Capital Market Association (ICMA) established its relationship with the University of Reading to create the ICMA Centre as **"the business school for financial markets"**. Our mission was to deliver teaching and research in finance of the highest standard and to contribute actively to policy debate.

Over the years, we have expanded our faculty numbers so that we are now among the largest in Europe and have introduced a wide range of Masters courses – both mainstream and more specialised – and this undergraduate programme. In addition, we offer a suite of executive education programmes, both certified and bespoke, as well as consultancy services.

The university's recent merger with Henley Management College to create Henley Business School now makes us part of one of the largest and most prestigious business schools in Europe and this will allow us both to expand further, as well as to use Henley's resources to enhance our taught programmes.

The Centre's facilities are among the best in Europe – we have our own award winning building, extended in 2008, which contains the largest simulated dealing room in Europe as well as outstanding teaching and research space.

In all, the ICMA Centre provides an excellent and stimulating environment in which to study and offers plenty of scope to apply theory to practice. Our reputation, our collaborative links with industry, and, not least, our 2,500 graduates from 86 countries, demonstrate our ongoing ability to meet our objectives.

I very much hope that you find our BSc Finance and Investment Banking to be of interest and I look forward to welcoming you to the Centre in due course.



**Professor John Board**  
Director of the ICMA Centre



# Our Success



Part of Henley Business School at the University of Reading, the ICMA Centre's success is a combination of factors:

- » The integration of applied finance theory and industry specific education
- » Professional and academic expertise
- » Strong links with banks, trade bodies and other financial institutions
- » The largest and best equipped dealing rooms in any European business school and teaching by former City traders
- » Specialist Career Development Unit providing focussed support.

Our state-of-the-art facilities include three dealing rooms running Thomson Reuters, Bloomberg and Datastream products, where students apply theory through simulations, and learn to access information and explore how markets really function. The Centre also boasts two lecture theatres, several seminar rooms, a dedicated research area, informal seating areas, café bars and Bloomberg TV.

## Dealing Rooms

The ICMA Centre has three dealing rooms with over 100 workstations in total, all sponsored by Thomson Reuters. This is the most extensive simulated dealing facility in the world.

The brand new 40-station flagship dealing room is equipped with all the latest trading technology giving it the feel of a real trading floor. It has a state-of-the-art ticker tape displaying up to date market prices, four plasma screens with the latest news and quotes and Thomson Reuters 3000 Xtra which allows students to immerse themselves in a trading environment.

As part of their coursework, students experience the thrill and pressures of a live market – they can take positions, quote two-way prices and manage the risk of a trading book.

Students also manage multi-asset portfolio's using live prices and the latest investment management technology. Having these essential practical skills in today's competitive and uncertain environment gives our students the edge over more traditional finance degrees.

# The BSc



The BSc Finance and Investment Banking is a three-year honours degree that has been enhanced to meet the needs of the global finance industry. It will provide you with a thorough preparation for a career in the financial markets through a combination of academic rigour and practical-skill building.

In the first year, you will study the core subjects of economics, accounting and finance and gain an introduction to the computer simulation of securities dealing and spreadsheet modelling. In the second year, you will cover key areas of specialisation including portfolio management, debt markets and instruments and corporate finance as well as undertake practical market making and hedging in the dealing rooms. The third year offers more opportunity for specialisation in fields such as risk management and financial engineering.

Graduates of the course continue to be highly sought after by international securities houses, including Deutsche Bank, HSBC, Morgan Stanley and Merrill Lynch. More information can be found on page 9.

“The three years I spent at the ICMA Centre were the **best years of my life**, both in terms of achieving academic excellence as well as enjoying student life in the company of enthusiastic fellow students from all over the world.”

Marija B | Class of 2005 | Associate | Quantitative Analysis in Portfolio Arbitrage

“The ICMA Centre provided an exciting and interactive environment which gave me the knowledge and skills used in the markets. **I am sure the course secured my position in a top tier investment bank**, which will expand my future possibilities. The course allowed me the opportunity to network with people from around the world with different backgrounds and different career ambitions. To sum up, it ensured my entry to the competitive finance industry and I had the time of my life doing it.”

Oliver Wheble | Class of 2002 | Exotic Interest Rate Risk | Wachovia Bank, London

# Course Content

## 1 FIRST YEAR Compulsory Modules

### Introductory Securities and Markets

Introduces you to the key financial markets, exchange mechanisms and the investment banks and investment management houses that operate in these markets and their various functions.

### Introductory Finance/Trading Simulation I

Provides you with a knowledge of the key concepts that underlie the valuation of financial assets, including an examination of the pricing of stocks, bonds and options. The module also provides an introduction to modern portfolio theory, a discussion of how to measure risk and return, and an analysis of whether financial markets are efficient. The trading simulation part of the module will introduce you to computer simulation of securities dealing and spreadsheet modelling. You will be taught the relevant theory and will experience how this theory works in a virtual dealing environment.

### Introductory Financial Accounting

Examines the principal financial statements produced by companies. You will cover many areas including: the concepts of profit and capital; the balance sheet and profit and loss account; company accounts; and cash flow statements – all are essential ingredients in corporate valuation.

### Principles of Macroeconomics

Introduces students to the major concepts; growth, inflation, unemployment and interest rates, and the interrelationships between these macroeconomic variables. In addition students will also obtain a

better understanding of i) determination of national income, ii) aggregate demand and the impact of fiscal policy, iii) money and the role of monetary policy in a closed economy, iv) aggregate supply and iv) unemployment, inflation and the Phillips curve.

### Principles of Microeconomics

Introduces students to the economic analysis of decision-making, how markets work, and why they sometimes fail. It focuses on making rational decisions (demand and supply, the market mechanism, elasticity, market efficiency and market failure) and business behaviour (production, cost, perfect competition and profit maximisation, pricing in pure and oligopoly, barriers to entry and competition, market structure, prices and economic policy, comparative advantage and international trade, strategic interactions).

### Introductory Quantitative Techniques

Gives you the ability to undertake quantitative problem solving in economic, management and financial applications, including the use of spreadsheets.



## 2 SECOND YEAR Compulsory Modules

### Portfolio Management

Examines the issues involved in understanding the investment market and the process of financial intermediation, constructing an optimum investment portfolio, evaluating the performance of that portfolio, and adjusting its composition through time to ensure that its performance remains optimal.

### Corporate Finance

Explores corporate financial decision-making, focusing on the analysis of investment, financing and payout decisions when firms face capital market imperfections such as taxes, conflicts of interest and informational problems.

### Financial Modelling/Trading Simulation II/CMS

#### >> Financial Modelling and Trading Simulation II:

Provides a rapid introduction to using MS Excel to solve a variety of practical problems related to finance. Many careers in banking and finance now require candidates to possess a strong grounding in spreadsheet modelling and a working knowledge of Visual Basic for Applications (VBA). The module also extends and builds upon the computer simulation of securities dealing that was examined in the Part I module "Introductory Finance/Trading Simulation I."

>> **Career Management Skills:** Provides you with the opportunity to develop self-awareness in the context of career decision making, extends knowledge of the career opportunities that are available to you, and the skills to make effective applications.

### Debt Markets and Instruments

There are two overall objectives to this module. First, to develop an appreciation of the 'fixed income' market by exploring traditional and innovative debt instruments and methods of pricing. Secondly, moving to a portfolio context, you will explore how different financial institutions use portfolios of debt instruments to achieve stated objectives.

### Introductory Econometrics

Designed to give you a sound intuitive grasp of the application of statistical techniques to solve problems in finance. Upon completion, you will be able to specify, estimate and evaluate statistical models.

## Optional Modules

You may choose one of the two modules below:

### Mathematics for Economists I

Provides you with a solid foundation of mathematical techniques. You will gain an understanding of economic theory that makes use of basic mathematical techniques and learn how to solve a range of economic problems.

### Institution Wide Language Programme (IWLP)

Choose from a variety of foreign languages (from levels 1 - 4).

For more information regarding the languages available please visit [www.reading.ac.uk/iwlp/intro.htm](http://www.reading.ac.uk/iwlp/intro.htm)

# 3 THIRD YEAR

## Compulsory Modules

### Derivative Securities/Trading Simulation III

Designed to combine the theoretical and practical approaches to derivatives pricing and trading. You will gain an overview of derivative securities and markets and a thorough understanding of derivatives pricing and trading. You will also be guided on the use of derivatives data and shown how to apply theoretical models and strategies presented in class through a number of case simulations in the dealing room. The trading cases involve both discrete and continuous time models and will require you to both trade and build hedging portfolios using put and call options.

### Financial Engineering

Designed to combine theoretical and practical approaches to exotic derivatives in different markets: equity, FX, interest rates and credit. The objectives of the module include providing you with an overview of the exotic products in different markets, familiarising you with the different pricing approaches and models, highlighting the importance of engineering and innovations in financial products and showing how to apply the theoretical models and engineering strategies presented in class through a number of assignments.

### Management of Risk

Introduces you to the latest techniques for measuring and managing market, credit and operational risk in financial institutions. Banks and other financial intermediaries invest considerable human and capital resources in trying to assess the risks in their day-to-day business and to increase the

awareness of such risks among their employees and business associates. This module will help you to develop critical risk management skills that are now considered indispensable for anyone wanting to undertake a career in the financial sector.

### Optional Modules

For the remaining modules you may choose any three from the following:

#### Alternative Investments

This module will give a detailed overview and analysis of the rapidly developing area of alternative investments. The fundamentals of hedge fund strategies will be described in detail, together with an analysis of the relative merits of alternative investments relative to more traditional asset classes, including the impact of the inclusion of alternative investments into portfolios. The distinctive characteristics of hedge funds will be discussed and their regulatory framework described. A detailed examination of how to appraise the performance of alternative assets will also be undertaken.

#### Computational Finance

Develops proficiency in writing programmes in Visual Basic for Applications (VBA) with associated statistical and graphical analysis of the results in Excel. VBA is essentially the programming language Basic with inputs/outputs from/to spreadsheets. This unit is based on the premise that the fullest understanding of models comes from calculating them and develops skills that are of everyday use in industry and are much sought after.

#### Dissertation (counts as two modules)

The aim of the dissertation is to allow students to define and execute a piece of research in finance on a topic of their choice, with direction from an academic supervisor.

#### Financial Econometrics

Building on the material introduced in Introductory Econometrics, this module examines a number of additional techniques that are relevant for financial applications, and in particular for modelling and forecasting financial time series. An introduction to the methods of maximum likelihood estimation and Generalised Method of Moments will be given, and emphasis will be placed on modelling volatility and its prediction. Case studies from the academic finance literature are employed to demonstrate the potential uses of each approach. Extensive use is also made of financial econometrics software to demonstrate how the techniques are applied in practice.

#### Foreign Exchange and Money Markets

The key aim of this module is to equip students with a firm understanding of the structure and operation of the foreign exchange and short-term interest rate markets. This will not only provide the technical knowledge required to trade in or use those markets, but will also introduce and illustrate a number of key financial concepts such as balance sheet constraints, liquidity, funding issues, no-arbitrage pricing and arbitrage. The module has a strong practical flavour. Students will be given the opportunity to trade various money market instruments on simulated electronic markets.

#### Institution Wide Language Programme (IWLP)

This option is only available to those who studied a language in Part Two and wish to proceed to the next level or those students who have an existing level of language skills and would therefore immediately qualify to enter a Level 2/3/4 course.

Please note that students are welcome to take a language on a 'not for credit' basis at any time.

#### Practice of Entrepreneurship

This dynamic and interactive module aims to inspire students and provide them with the entrepreneurial skills and confidence needed to put plans into action. Students will learn from the experience of successful entrepreneurs and are given a solid understanding of the realities of a business start-up. Topics include entrepreneurial forms and behaviour, creativity and innovation, idea development and feasibility testing, understanding market dynamics and satisfying customers, raising finance, intellectual property, networking, writing a business plan and pitching to investors.

Please note that the information in this brochure was correct at the time of going to print (May 09). However we may offer additional or vary modules each year – for most up-to-date information please visit the website.

# Scholarships and the Application Process



## How to Apply

All applications, whether UK, EU or international, must go through the Universities and Colleges Admissions Services (UCAS). Our programme code is N302.

## Academic Entry Requirements

**GCSE:** Mathematics grade B and English grade C or above.

**A and AS Levels:** A total of 340 pts from either 3 A levels or 2 A levels and 2 AS levels or a total of 360 pts from 3 A levels and 1 AS level.

Subjects must include a minimum 50 points (B) grade in AS level Mathematics.

**English:** Proficiency is required for international students.

**TOEFL:** (Test of English as a Foreign Language) – score of 570, with TWE of 5 for the paper-based version of the test, 230 for the computer-based and 88 for the Internet based test.

**IELTS:** (British Council International English Language Test) – score of 6.5 overall with no significant weaknesses in any component of the test.

## International Foundation Programme

Overall average of Distinction level results. (Please note that the foundation programme must contain a core element of Mathematics).

## Other Qualifications

We welcome students with other qualifications e.g. International Baccalaureate (with Standard Level Mathematics), Scottish Highers, Irish Highers etc. You will be expected to attain an equivalent standard to an A Level applicant.

## Examinations and Assessment

The majority of units are examined with an element of coursework. You must pass your first year examinations in order to proceed to the second year, but these results do not count towards your final degree. The results of your second and third year examinations are combined to form your final degree classification; these are weighted a third and two thirds accordingly.

## Scholarships and Awards

### Undergraduate Scholarships

The ICMA Centre offers guaranteed scholarships of £2000 each to students who achieve 360 UCAS points (three A grades) from the three A levels used for entry (not to include General Studies). International scholarships are also available. The University of Reading also gives scholarships and bursaries, visit [www.reading.ac.uk](http://www.reading.ac.uk) for more details.

## Stephen Cooke Scholarship Programme

The Securities & Investment Institute's (SII) Educational Trust sponsors the commemorative Stephen Cooke Scholarship programme, which grants two Premier scholarships of £5,000 each and one General scholarship of £3,000 each year. These scholarships are only available to SII accredited Centres of Excellence, which are an elite group of universities including ourselves, selected by the SII as offering leadership in academic education, focused on financial markets. These prestigious awards commemorate the late Stephen Cooke, former Senior Partner of the stock broking firm Gerrard Vivian Gray.

In order to win the awards, students are evaluated on an essay submitted to the SII board, a general knowledge test and panel interview held at the SII in London. Entry criteria apply, please see our website for more details.

“I consider myself very fortunate to have received this award given the calibre of the competitors. It was a great experience, which provided **an invaluable insight into the world of finance**. I believe the BSc at the ICMA Centre has equipped me with the perfect skill set to give me the edge for a successful career in the City.”

Tamoor Ali | 2008 Stephen Cooke Scholarship winner

# Careers and After Graduation



## Career Development Unit

The Career Development Unit works solely with ICMA Centre students and its mission is to ensure that our graduates possess the practical career management skills to underpin the theoretical knowledge essential to succeed in today's global investment banking and securities markets.

We recognise the importance of career development and have integrated specialist career management assistance in the programme. The Career Development Unit is staffed by financial sector professionals with specialist experience of graduate recruitment and development. We maintain close links with the investment banking community and students are able to attend presentations by market practitioners and alumni working within the banking and securities industries.

Working with the Unit, you will develop your own career strategy, including CV preparation, writing winning applications, assessment centre exercises and interview skills.

## Internships

With our strong connection to firms in the industry and our excellent placement record, we are in a strong position to help students seeking to arrange an internship during the summer vacation.

Students are encouraged to find summer internships between Year 2 and 3, which may, in turn, lead to the offer of a full-time position (subject to the successful completion of your degree).

## Alumni

Once you graduate, you become a member of our Alumni Association. Reunions are held throughout the year and with more than 80 nationalities represented within the organisation, the ability to network on a global basis is one of the key benefits of study at the Centre.

Alumni benefit from:

- » Website, which includes all the latest news, jobs board, forums, photos, profiles
- » ICMag – the bi-annual newsletter
- » Networking opportunities
- » Regular reunion events held around the world.

## Graduate Destinations

Our statistics show that typically, more than 90% of graduates are in employment or further study within 6 months of graduating:

Graduate Destinations (2008)	%
Financial Markets (Sales, Trading, Origination)	22
Risk Management/Compliance, Regulation & Control	16
General Management (including Financial Management)	14
Postgraduate Study	12
Professional Services (including Management Consultancy, Accountancy)	12
Asset Management	10
Research Analyst	4
Operations Management/IT	4
General Banking Management	4
Corporate Finance	2

*Deutsche Bank, Barclays Capital, HSBC, WestLB, Morgan Stanley and UBS Investment Bank are among the international securities houses and investment banks that have recruited our graduates.*

# Life at Reading



You've found out about our degree, now find out more about Henley Business School, the University and the town of Reading.

## Henley Business School

One of Europe's largest full-service business schools, Henley is also one of the very few international business schools to hold triple accredited status from the major awarding bodies in the UK, US and Europe (AMBA, EQUIS, AACSB).

The pragmatic yet innovative programmes are tailored to service the rapidly evolving needs of modern business at every level, from undergraduate degrees to executive education, encompassing our specialist postgraduate Masters programmes, the world-ranked Henley MBA and our DBA (Doctor of Business Administration) and PhD doctoral programmes.

Alongside the ICMA Centre, Henley Business School comprises four other distinctive units:

- >> School of Management
- >> School of Real Estate and Planning
- >> School of Economics
- >> Executive Education.

## The University

The University of Reading is an internationally renowned university, and ranked among the top 200 universities in the world (The Times). Established over 100 years ago, it is situated within its own 300 acre landscaped campus near the centre of Reading and remains one of the UK's largest, best-known and successful campus-based universities.

Our main Whiteknights site is set in 130 hectares of beautiful parkland. This is the heart of university life and provides a special sense of community. With its green open spaces, lake, rare trees and wildlife it is an exceptional environment in which to study, live and relax. Everything you need is here or within walking distance.

The University offers excellent sports facilities and at the hub of Whiteknights is the very popular Reading University Students' Union (RUSU). A hive of activity day and night, it provides easy access to services, shopping and a ready-made social life. Its state-of-the-art award-winning entertainment venue,

3Sixty, is a prime example of the University's ongoing investment in first-class facilities.

The University is currently undertaking a huge capital investment in facilities as part of its ten year development plan designed to enhance the university's academic activity. It will ensure the University of Reading continues to be regarded as one of the leading universities in the UK and internationally. Work includes redevelopment and building of new halls of residence, new teaching facilities, and enhanced sports and recreation provision.

The University is conveniently located for central London with high speed trains from Reading to London Paddington with a journey time of only 22 minutes. A regular coach service also connects the campus with the City and Heathrow Airport.

## Accommodation

The University of Reading has extensive facilities and provides accommodation for a much higher proportion of students than many other universities. Over 96% of new first year students who request a place will be offered university accommodation.

No two Halls of Residence are the same; each has its own character, offering you a welcoming and secure environment in which to study and relax. There are a variety of options open to you including fully catered, self-catering and bedrooms with ensuite bathroom facilities. You can use your own computer and printer in most Halls and will have a telephone with voicemail as well as broadband internet connection. For more information please visit [www.reading.ac.uk/accommodation](http://www.reading.ac.uk/accommodation).

## The town of Reading

At the heart of the beautiful Thames Valley, between Windsor and Oxford, Reading has quickly become one of the fastest growing centres for business, shopping, transport and leisure. It combines over a thousand years of history with all the assets of a thriving, modern town. The town has its sights firmly set on the international business world, becoming the 'silicon valley' and hi-tech centre of the UK and attracting several major international computer companies, including Microsoft, Compaq and The Oracle Corporation.

# Visiting the ICMA Centre

## BSc Taster Day

These usually take place in June and September to coincide with the University's Open Days.

They are designed to give students an enjoyable and informative introduction to the exciting field of world finance and the opportunity to get a real feel for the ICMA Centre, the University and our innovative BSc degree.

The schedule also includes talks on careers, student finance and accommodation, a tour of the campus and Halls of Residence, as well as the opportunity to meet BSc graduates and take part in an exciting interactive dealing room session.

Visit [www.icmacentre.ac.uk/open\\_days](http://www.icmacentre.ac.uk/open_days) to register.

## University Open Days

The University runs undergraduate Open Days in June, September and October. Please contact the Student Recruitment and Schools Liaison Office **+44 (0)118 378 8619** for information about these.

## Independent Visit

We welcome visitors to the Centre throughout the year, but please contact us in advance to arrange an appointment.

## Student Case Studies

See our video case studies online at [www.icmacentre.ac.uk/student\\_case\\_studies](http://www.icmacentre.ac.uk/student_case_studies)

“I came here to get a **good degree** and a **good job** and I achieved both.”

Loukas Anastasiou | Class of 2007 | PwC, Cyprus



## Postgraduate Courses at the ICMA Centre

Further information regarding all of our programmes can be found on our website where you can also request brochures which are of interest to you.

MSc Capital Markets, Regulation and Compliance  
MSc Corporate Finance  
MSc Finance and Real Estate  
MSc Financial Engineering  
MSc Financial Risk Management  
MSc International Securities, Investment and Banking  
MSc Investment Banking and Islamic Finance  
MSc Investment Management  
PhD Programme



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The ICMA Centre is supported by the International Capital Market Association, the trade association and market regulator for some 400 member organisations active in the global securities market.