Mathematics & Statistics
Undergraduate study
One of the world’s top 1% universities

Come and visit us

Open days and student visits

www.glasgow.ac.uk/visit

We offer many opportunities for you to visit us and find out about the University.

• **Open days:** If you’re interested in visiting the University before you apply for a specific programme, we’d be happy to welcome you to one of our Open Days held in June, September and October.

• **Applicants’ Visit Day:** Once you have applied to and received an offer from the University, you will get another chance to visit us on our Applicants’ Visit Day in March.

• **Afternoon visits:** If you can’t make either of the above we will be running three afternoon visits throughout the course of the year.

• **Plan your own visit:** You are welcome to visit the University at a time that suits you, to gather information and see the sights of our beautiful campus in your own time.

How to apply

www.ucas.com

You must apply through the Universities & Colleges Admissions Services (UCAS), tel: 0871 468 0468 or visit their website.

The Glasgow experience

The University of Glasgow is one of the world’s top universities. Since opening our doors over 550 years ago, we’ve dedicated our time to inspiring great minds throughout history, from the father of economics, Adam Smith, to the pioneer of television, John Logie Baird.

Here are just a few reasons why our students choose to join us:

• Established in **1451, fourth oldest** University in the English-speaking world

• **23,000** students from **130** countries

• Member of the prestigious **Russell Group** of leading UK research universities

• **1st** in the Russell Group for student satisfaction (International Student Barometer 2012)

• One of the UK’s **top 3** best-value universities (Student Value for Money Report 2012)

• In the UK’s **top 6** for career prospects (The Guardian University Guide 2013)

• Over **100** clubs and societies, from karate to student theatre

• **Two** student unions with GUU being voted **UK Student Union of the Year**

• One of the best libraries in Europe, open **361** days of the year from 7.15am–2am with **2.5 million** print books and journals.

Find out more about the Glasgow experience:

• Get our students’ views on campus life: **www.glasgowgen.net**

• Chat to one of our current students: **www.glasgow.ac.uk/studentnetwork**

• Email us direct: **student.recruitment@glasgow.ac.uk**
Mathematics/Applied Mathematics/
Pure Mathematics

Mathematics is a vast and ever-growing subject which incorporates successful explorations of numerical, geometrical and logical relationships.

95% BSc Mathematics students were satisfied overall
90% BSc Mathematics students in work/study six months after finishing

Data published by Unistats (unistats.direct.gov.uk) January 2013.

Programme structure
You can choose to take a Mathematics, Applied Mathematics or Pure Mathematics Honours degree. You will make your decision at the end of second year.

Year 1
In your first year you will take a number of courses covering matrices, linear equations, probability, complex numbers, vectors and calculus. You will also study two other subjects of your choice in year 1 – www.glasgow.ac.uk/ug/aboutdegrees.

Year 2
We offer a wide variety of courses in second year covering multivariable calculus, linear algebra, topics in applied mathematics, topics in linear algebra and calculus, introduction to real analysis, foundations of pure mathematics, financial modelling, number theory and cryptography. You will also study one or two other subjects in year 2 – www.glasgow.ac.uk/ug/aboutdegrees.

Years 3, 4 and 5
If you progress to Honours (years 3 and 4), you will study a wide range of topics.

The Mathematics degree programme is for students who are interested in all aspects of mathematics, not just those aspects that have immediate applications. It is possible to specialise towards applied or pure mathematics in the final years. The Mathematics degree provides an ideal route for keeping future options open.

The Applied Mathematics degree programme allows students with a flair for mathematics who prefer the practical and applicable aspects of the subject to concentrate on these elements. You will study a wide range of subjects in applied mathematics including mathematical biology, solid and fluid mechanics, and mathematical physics.

The Pure Mathematics degree programme is ideal for students who prefer the abstract and logical aspects of the subject. You will study a wide range of subjects in pure mathematics including geometry, topology, algebra and analysis. These courses give a wide-ranging introduction to pure mathematical thought, applicable to a wide range of careers.

In fourth year you will have the opportunity to specialise in your area of choice and will undertake a project carried out under the personal supervision of a member of staff.

There is an opportunity to take an MSci degree – a five-year Advanced Honours degree.

Partnership with schools
A popular fourth-year project option is to take part in our ambassador scheme, where students spend time in schools, experiencing teaching at first hand and developing vital workplace skills.

Our international links
There are currently two options available for study abroad: the Erasmus Exchange Scheme (where you will study at a major European university for three to 12 months) and the International Exchange Programme, which allows you to spend a year or semester in one of our partner institutions in Australia, Argentina, Canada, Chile, China, Japan, Korea, Hong Kong, Mexico, New Zealand, Singapore, or the USA.

Career prospects
Many of our graduates go on to careers in the financial services sector or computing, or undertake postgraduate study. Others are employed in industry, using the modelling and problem-solving skills gained on the programme.
\[ m = \frac{f(x_2) - f(x_1)}{x_2 - x_1} = \frac{y_2 - f(x_1)}{x_2 - x_1} \]

\[ x_1 - x_0 = -\frac{f(x_0)}{f(x_1)} \]

\[ x_1 = x_0 - \frac{f(x_0)}{f(x_1)} \]
Programme structure
This degree programme will equip you with the various skills – ranging from technical to presentational – required by statisticians. Throughout the programme there is a major emphasis on practical work using statistical packages.

Year 1
In your first year you will take two courses covering topics in probability and introductory statistical methods, and design of experiments, analysis of variance and statistical methods for paired data.

You will also study Mathematics and one other subject of your choice in year 1 – www.glasgow.ac.uk/ug/aboutdegrees.

Year 2
You will take four courses covering topics in statistical methods and probability, introducing the ideas of likelihood and regression modelling.

You will also study Mathematics and possibly one other subject in year 2 – www.glasgow.ac.uk/ug/aboutdegrees.

Years 3, 4 and 5
If you proceed to Honours (years 3 and 4) you will gain an imaginative mix of theoretical and practical training, which involves project planning, report writing and the development of presentational skills. General topics covered across courses include probability, modelling, design, inference, computational inference, sampling and databases and a range of applications including biostatistics, environmental statistics and financial statistics.

You will also complete case studies and projects on topics which may be drawn from the fields of bioinformatics, environmental studies, medicine, psychology, sports science and veterinary science.

One important feature of project activities is a presentation. You will give a talk or produce a poster describing your project problem, your analyses and results. This, along with writing a report in non-technical language, provides you with two important transferable skills. You will also gain experience in teamwork through working in groups and you will learn to use statistical packages as well as gaining appreciation of the use and misuse of computers and computer software in statistics.

You can take Statistics as an MSci, with or without placement – a five-year Advanced Honours degree which aims to foster the development of critical judgement and independent scientific work. The placement (competitive) provides a year’s work experience.

Our international links
We have a double degree programme with the University of Bologna in Statistical Science. Glasgow students spend their third year in Bologna, where staff will teach in English. Other opportunities for study abroad are available through Erasmus and international exchanges.

Career prospects
Our graduates have statistical, computational, numerate and presentational skills which are applicable in many fields such as medicine, education, transport, agriculture, engineering and economics. Our graduates are employed in a variety of posts such as quality engineer, actuary, accountant, credit risk analyst, clinical statistician, statistician, statistical programmer, teacher and operational researcher. Others go on to undertake postgraduate degrees.

You may also be interested in
- Mathematics/Applied Mathematics/Pure Mathematics
- Accounting & Statistics
- Finance & Statistics

Degrees and UCAS codes
BSc (Hons) (G300) – four years; MSci (G302) – five years; MA (Hons) (G301) – four years

Accreditation
The Royal Statistical Society accredits our single Honours degree and most Joint ones.

Joint Honours
At Honours level, Statistics can be taken as a Single Honours or Joint Honours degree. See www.glasgow.ac.uk/ug/statistics for a full list of Joint Honours combinations and UCAS codes.

Entry requirements
BSc, MSci
Highers: AAAA or AABBB (including two science subjects) in first sitting – unconditional offer. Applicants who achieved AAAB or AABB (including two science subjects) at their first sitting will receive either a conditional (on second sitting results) or unconditional offer. Additional offers may be made to applicants who achieved ABBB and AABBB (including two science subjects) at their first sitting. Applicants who receive an offer conditional on second sitting results will be required to study Advanced Highers in relevant subjects as an integral part of their conditional offer. A-levels: AAB, including Mathematics and preferably one other science. IB: Minimum 34 points.

MA
Highers: AAAA or AABBB (including English and a humanities subject or a language (including Gaelic) at grades A/B or B/A) in first sitting – unconditional offer. Applicants who achieved AAAB or AABB (including English and a humanities subject or a language (including Gaelic) at grades A/B or B/A) at their first sitting will receive either a conditional (on second sitting results) or unconditional offer. Additional offers may be made to applicants who achieved AAAB or AABB at their first sitting. A-levels: AAB; IB: Minimum 34 points.

For a full list of alternative qualifications please see www.glasgow.ac.uk/undergraduate/entryrequirements.

Advanced entry
If you have exceptional A-level or Advanced Higher grades it’s possible to follow a faster route, which allows you to complete a standard BSc (Hons) or MSci degree in one year less than usual – see www.glasgow.ac.uk/undergraduate/degrees/advancedentry.

Glasgow International College
For international students entry to this programme is supported by courses from Glasgow International College - www.glasgow.ac.uk/gic.

E: student.recruitment@glasgow.ac.uk
W: www.glasgow.ac.uk/ug/statistics
Accounting & Mathematics

Accounting is the process of collecting, measuring, analysing and communicating information to aid decision making within business and other organisations. Mathematics incorporates successful explorations of numerical, geometrical and logical relationships.

Programme structure

Years 1 and 2
In first and second years you will take courses in:
• Mathematics
• Statistics
• Financial accounting
• Economics
• Management accounting
• Finance.

Years 3 and 4
If you progress to Honours (years 3 and 4) you will take a range of core and optional courses including:
• Analysis 1
• Mathematical methods 1
• Financial mathematics
• Advanced financial accounting practices
• Audit theory and practice.

In fourth year you will also undertake a research project/dissertation, usually supervised within the School of Mathematics & Statistics, although a limited number of projects will be supervised by the Business School.

Special feature
The University has close links with professional bodies and employers, many of whom offer placement opportunities to students. Some professional firms run presentations and drop-in sessions for prospective graduates and also run separate events to give students a chance to interact with their staff.

Our international links
You will have the opportunity to apply to study abroad. There are currently two options available: the Erasmus Exchange Scheme and the International Exchange Programme.

Under the Erasmus scheme you will study at a major European university, for three to 12 months. As this exchange programme is partly funded by the European Union you will receive additional financial support from the EU, to cover additional travel and living costs.

The International Exchange Programme allows you to spend a year or semester in one of our partner institutions in the following countries: Australia, Argentina, Canada, Chile, China, Japan, Korea, Hong Kong, Mexico, New Zealand, Singapore, USA.

Career prospects
The financial sector, locally and throughout the UK, actively recruits graduates skilled in all aspects of mathematics, and a significant number of our Honours graduates find employment in the commercial sector, in insurance, accounting, finance or banking.

You may also be interested in:
• Accounting & Statistics
• Finance & Mathematics
• Finance & Statistics

Data published by Unistats (unistats.direct.gov.uk) January 2013.

Accountancy students were satisfied overall
Mathematics students were satisfied overall

Degree and UCAS code
BSc (Hons) (NG4C) – four years

Entry requirements
Higher:
AAA or AAABB (including two science subjects) in first sitting = unconditional offer.

Applicants who achieved AAAB or ABBB (including two science subjects) at their first sitting WILL receive an offer from the University. This offer may be conditional (on second sitting results) or unconditional, depending on how many applications are received from students who have attained these grades.

Additional offers, either conditional or unconditional, MAY be made to applicants who achieved between ABBB and AABB (including two science subjects) at their first sitting. A decision re these applications will be made in March 2014 once all applications have been reviewed.

Applicants who receive an offer conditional on second sitting results will be required to study Advanced Highers in relevant subjects as an integral part of their conditional offer.

A-levels:
AAA/ABB including Mathematics, and GCSE English at B.

IB:
36 points. Must have Mathematics and English or any humanities subject at subsidiary level 5 or better.

For a full list of alternative qualifications please see www.glasgow.ac.uk/undergraduate/entryrequirements.

Note
You will not be a qualified accountant when you graduate from this programme.

E: student.recruitment@glasgow.ac.uk
W: www.glasgow.ac.uk/ug/accountingmathematics
Accounting & Statistics

Accounting is the process of collecting, measuring, analysing and communicating information to aid decision making within business and other organisations. Statistics is concerned with the drawing of objective conclusions from investigations where outcomes are subject to uncertainty or variability.

Programme structure

Years 1 and 2
In first and second years you will take courses in
• Management accounting
• Financial accounting
• Finance
• Economics
• Statistics
• Mathematics.

Years 3 and 4
If you progress to Honours (years 3 and 4) you will take a range of core and optional courses, including courses in accounting and statistics.

In fourth year you will also undertake a dissertation supervised within the Business School.

Special feature

The University has close links with professional bodies and employers, many of whom offer placement opportunities to students. Some professional firms run presentations and drop-in sessions for prospective graduates and also run separate events to give students a chance to interact with their staff.

Our international links

You will have the opportunity to apply to study abroad. There are currently two options available: the Erasmus Exchange Scheme and the International Exchange Programme.

Under the Erasmus scheme you will study at a major European university, for three to 12 months. As this exchange programme is partly funded by the European Union you will receive additional financial support from the EU, to cover additional travel and living costs.

The International Exchange Programme allows you to spend a year or semester in one of our partner institutions in the following countries: Australia, Argentina, Canada, Chile, China, Japan, Korea, Hong Kong, Mexico, New Zealand, Singapore, USA.

Career prospects

The financial sector, locally and throughout the UK, actively recruits graduates skilled in all aspects of statistics, and a significant number of our Honours graduates find employment in the commercial sector, in insurance, accounting, finance or banking.

You may also be interested in
• Accounting & Mathematics
• Finance & Mathematics
• Finance & Statistics

‘The quality of students we look for is very high and Glasgow is a great resource for finding those high-calibre students for both intern placements and full-time graduate opportunities.’

JP Morgan Scotland
Finance & Mathematics

Finance is the study of the theory and practice of financial decision-making. Mathematics incorporates successful explorations of numerical, geometrical and logical relationships.

Programme structure

Years 1 and 2
In first and second years you will take courses in
- Mathematics
- Statistics
- Financial accounting
- Economics
- Management accounting
- Finance.

Years 3 and 4
If you progress to Honours (years 3 and 4) you will take a range of core and optional courses including
- Analysis 1
- Mathematical methods 1
- Financial mathematics
- Capital markets
- International financial markets
- Financial statement analysis
- Financial markets and financial institutions.

In fourth year you will also undertake a research project/dissertation, usually supervised within the School of Mathematics & Statistics, although a limited number of projects will be supervised by the Business School.

Special feature
The University has close links with professional bodies and employers, many of whom offer placement opportunities to students. Some professional firms run presentations and drop-in sessions for prospective graduates and also run separate events to give students a chance to interact with their staff.

Our international links
You will have the opportunity to apply to study abroad. There are currently two options available: the Erasmus Exchange Scheme and the International Exchange Programme.

Under the Erasmus scheme you will study at a major European university, for three to 12 months. As this exchange programme is partly funded by the European Union you will receive additional financial support from the EU, to cover additional travel and living costs.

The International Exchange Programme allows you to spend a year or semester in one of our partner institutions in the following countries: Australia, Argentina, Canada, Chile, China, Japan, Korea, Hong Kong, Mexico, New Zealand, Singapore, USA.

Career prospects
The financial sector, locally and throughout the UK, actively recruits graduates skilled in all aspects of mathematics, and a significant number of our Honours graduates find employment in the commercial sector, in insurance, accounting, finance or banking.

You may also be interested in
- Accounting & Mathematics
- Accounting & Statistics
- Finance & Statistics

Degree and UCAS code
BSc (Hons) (NG3C) – four years

Entry requirements
Highers: AAAA or AAABB (including two science subjects) in first sitting = unconditional offer.

Applicants who achieved AAAB or AABBB (including two science subjects) at their first sitting will receive an offer from the University. This offer may be conditional (on second sitting results) or unconditional, depending on how many applications are received from students who have attained these grades.

Additional offers, either conditional or unconditional, may be made to applicants who achieved between ABBB and AABBB (including two science subjects) at their first sitting. A decision on these applications will be made in March 2014 once all applications have been reviewed.

Applicants who receive an offer conditional on second sitting results will be required to study Advanced Highers in relevant subjects as an integral part of their conditional offer.

A-levels: AAA*AB including Mathematics, and GCSE English at B.

IB: 36 points. Must have Mathematics and English or any Humanities subject at subsidiary level at 5 or better.

For a full list of alternative qualifications please see www.glasgow.ac.uk/undergraduate/entryrequirements.

Finance students were satisfied overall

Mathematics & Statistics students were satisfied overall

95%
92%

Data published by Unistats (unistats.direct.gov.uk) January 2013.
Finance & Statistics

Finance is the study of the theory and practice of financial decision-making. Statistics is a scientific discipline that is concerned with the drawing of objective conclusions from investigations where outcomes are subject to uncertainty or variability.

Programme structure

Years 1 and 2
In first and second years you will take courses in
- Finance
- Financial accounting
- Management accounting
- Economics
- Statistics
- Mathematics.

Years 3 and 4
If you progress to Honours (years 3 and 4) you will take a range of core and optional courses, including courses in finance and statistics.

In fourth year you will also undertake a dissertation supervised within the Business School.

Special feature
The University has close links with professional bodies and employers, many of whom offer placement opportunities to students. Some professional firms run presentations and drop-in sessions for prospective graduates and also run separate events to give students a chance to interact with their staff.

Our international links
You will have the opportunity to apply to study abroad. There are currently two options available: the Erasmus Exchange Scheme and the International Exchange Programme.

Under the Erasmus scheme you will study at a major European university, for three to 12 months. As this exchange programme is partly funded by the European Union you will receive additional financial support from the EU, to cover additional travel and living costs.

The International Exchange Programme allows you to spend a year or semester in one of our partner institutions in the following countries: Australia, Argentina, Canada, Chile, China, Japan, Korea, Hong Kong, Mexico, New Zealand, Singapore, USA.

Career prospects
The financial sector, locally and throughout the UK, actively recruits graduates skilled in all aspects of mathematics, and a significant number of our Honours graduates find employment in the commercial sector, in insurance, accounting, finance or banking.

You may also be interested in
- Accounting & Mathematics
- Accountancy & Statistics
- Finance & Mathematics

Data published by Unistats (unistats.direct.gov.uk) January 2013.

95% 92%
Finance students were satisfied overall Mathematics & Statistics students were satisfied overall

Degree and UCAS code
BSc (Hons) (GN33) – four years

Entry requirements
Highers: AAAA or AAABB (including two science subjects) in first sitting = unconditional offer.

Applicants who achieved AAAB or ABBBB (including two science subjects) at their first sitting WILL receive an offer from the University. This offer may be conditional (on second sitting results) or unconditional, depending on how many applications are received from students who have attained these grades.

Additional offers, either conditional or unconditional, MAY be made to applicants who achieved between ABBB and AABB (including two science subjects) at their first sitting. A decision re these applications will be made in March 2014 once all applications have been reviewed.

Applicants who receive an offer conditional on second sitting results will be required to study Advanced Highers in relevant subjects as an integral part of their conditional offer.

A-levels: AAA/A*AB including Mathematics, and GCSE English at B.

IB: 36 points. Must have Mathematics and English or any Humanities subject at subsidiary level at 5 or better.

For a full list of alternative qualifications please see www.glasgow.ac.uk/undergraduate/entryrequirements.

E: student.recruitment@glasgow.ac.uk
W: www.glasgow.ac.uk/ug/financestatistics
The city of Glasgow

- The UK’s 3rd largest city and one of the world’s top student cities (QS Best Student Cities 2012)
- Lively nightlife with more than 700 bars, pubs and nightclubs and 7 cinemas, including the tallest cinema in the world
- More than 20 museums and art galleries, including Kelvingrove Art Gallery & Museum and the Gallery of Modern Art
- Known as ‘dear green place’ with over 90 parks and public gardens
- Host of the MOBO awards x 2 plus over 10 different festivals each year
- UK’s first UNESCO City of Music, host to around 130 music events every week
- Largest retail centre in the UK outside London with everything from high street favourites to independent and vintage stores
- Commonwealth Games host 2014
- Excellent sports facilities including wall climbing venues, indoor and outdoor ski slopes and the Sir Chris Hoy Velodrome.

‘Glasgow is one of Britain’s urban gems.’

James Bainbridge, Author, Lonely Planet’s Study Glasgow

Follow Glasgow on Facebook, Twitter and YouTube: www.glasgow.ac.uk/interact

Discover the city with your free Glasgow App. Search ‘Glasgow’.