

Frequently asked questions on:
**Degree in Financial Mathematics &
Economics**
CAO code GY309.

This information leaflet gives basic information with an emphasis on answering the *Frequently Asked Questions, (FAQs)*, on the degree programme in Financial Mathematics and Economics, CAO code GY309.

A separate brochure with more detailed technical information on the degree is also available.

If you have further enquiries please do not hesitate to contact us.

Further information may also be obtained at:

www.maths.nuigalway.ie

or send an email to:

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The programme began in 1998 (first graduates in 2002) and consists of courses in Mathematics, Probability & Statistics, Economics, and Computer Science. It gives a rigorous training in the area of Financial (including Actuarial) mathematics, which has widespread applications in a number of diverse areas. This is complemented by courses in Economics, Probability & Statistics and Computer Science.

Answers to *Frequently Asked Questions (FAQs)*

1 What level of mathematics is required?

A C3 or better in honours LC Maths is necessary – a certain minimum *ability* in Mathematics is required.

2 This is a BSc degree – what Science background do I need?

It is *not required* to have a science subject in LC – this is an inter-faculty programme from the Science and Arts faculties. However, having a science subject in LC would certainly help with the scientific thinking involved. The degree awarded is a BSc.

3 How much of the programme is Economics? Do I require to have studied this subject previously?

It is not at all required to have studied economics previously; economics is about a quarter of the programme.

4 Is this the same as Actuarial Mathematics?

Financial mathematics is *not* actuarial mathematics but includes certain aspects of actuarial science. Financial mathematics in this programme contains, for example, courses on *Financial Derivatives*, *Option Pricing*, *Neural Networks* (this is essentially computer learning programmes used for prediction and estimation) and more *Probability & Statistics*, which are not part of Actuarial Mathematics. Financial mathematics is broader and prepares persons for employment at the *technical* level of finance, computing and many of the new areas which require highly numerate graduates.

There are programmes at UCD and DCU which deal with Actuarial Mathematics specifically.

5 What will be the main areas of employment?

The main areas of employment will in the financial area – the Financial Sector, which traditionally employs many mathematics graduates, has expanded, and is still expanding, at an enormous rate in Ireland.

However in addition, graduates will also secure employment in many other areas which traditionally employed mathematics graduates – for example, in *the Public Sector* (in areas such as Meteorological Service and Central Statistics Office) and also in the *Computing industry*.

6 What are the exemptions or equivalent courses for those who may wish to become actuaries?

The new strategy of the Institute of Actuaries came into effect in the year 2000 and the examinations will consist of series 100, 200, 300 and 400.

The 100 series has 9 courses, 101-109, in the areas Financial and Actuarial Mathematics, Probability/Statistics, and Economics/Finance – all of these are covered in this programme.

The 200 series consists of just the one course, 201, *Communications*. There are 4 examinations, 301-304, in the 300 series, consisting of courses in insurance and pensions – some of the topics in this 300 series are dealt with in this programme. Students must take one option in the 400 series (out of the present 4 on offer). The exact exemptions have not yet been agreed with the Institute as indeed the graduates will not come on stream until 2002.

Note that actuarial studies **contains a number of courses in Economics** and this is the only programme of this type available which includes this subject as a major element.

7 How many points will I need?

The points can vary from year to year depending on the demand, and applications, and so a definite answer cannot be given. Previous years' points levels give *some* indication. It should be noted that anyone who gets into this programme no matter at what points' level has the *ability* to do very well but, as with *any* programme, the student must *apply* herself/himself to the tasks required as is necessary.

8 What is the difference between a Denominated degree and an Undenominated Degree?

In a denominated degree, such as this one, the student enters a programme of study on the topics of the degree; some options or choices are allowed and some basic related material must be studied but essentially the *core* of the course is predetermined.

In an undenominated degree, the student enters a programme of study in which at the outset it has not been decided in which degree subject(s) the student would graduate; the choice of such subject(s) is decided at the end of second and third years.

It is possible under certain restricted circumstances to transfer between programmes *provided all the prerequisites* have been studied for the programme to which the student wishes to transfer.