

FACULTY OF SCIENCE AND HEALTH

Programme Regulations 2022 - 2023

Programme Title BSc in Actuarial Mathematics

Programme Code ACM

Offered on a full-time or part-time Full-time basis

<u>Note</u>: Programme Regulations should be read in conjunction with Marks and Standards which can be found at <u>https://www.dcu.ie/ovpaa/Policies-and-Regulations.shtml</u>

1. **Programme Specific Rules and Requirements**

1.1 Calculation for the Award Classification

The calculation of the final year award classification includes contributions from previous years' results as follows:

| Year/Subject contribution | Contribution to the award classification | |
|---------------------------|--|--|
| Year 2 | 25% | |
| Year 3 | 15% | |
| Year 4 | 60% | |

1.2 Module Calculation

There are modules on this programme where the module mark will be calculated as the greater of (a) the weighted average of the continuous assessment percentage mark and the terminal examination percentage mark or (b) the terminal examination mark.

These modules are listed below:

| Module Code | Module Title | |
|-------------|-------------------------------|--|
| MS103 | Linear Mathematics I | |
| MS104 | Linear Mathematics II | |
| MS113 | Integral Calculus | |
| MS114 | Sequences and Series | |
| MS205 | Calculus of Several Variables | |

| MS217 | Linear Algebra |
|-------|---|
| MS231 | Analysis 2 |
| MS211 | Introduction to Differential Equations |
| MS232 | Probability II |
| MS408 | Probability and Finance II (Intermediate) |
| MS437 | Probability and Finance I (Intermediate) |
| MS434 | Optimisation |

2. Derogations from Marks and Standards

This programme is fully accredited by the Institute and Faculty of Actuaries, UK. A minimum of 40% must be achieved in both the examination and continuous assessment elements for an overall pass in the following modules:

| Module Code | Module Title | |
|-------------|--------------------------------|--|
| MS117 | Probability I | |
| MS226 | Statistics I | |
| MS228 | Statistics II | |
| MS318 | Financial Mathematics | |
| MS338 | Actuarial Modelling | |
| MS349 | Financial and Actuarial Models | |
| MS427 | Financial Economics I | |
| MS430 | Financial Economics II | |
| MS424 | Life Contingencies | |
| MS447 | Time Series (Intermediate) | |
| MS455 | Simulation for Finance | |

3. Progression

3.1 Credits for progression

Students must have successfully completed a minimum of 60 credits in a study period in order to progress to the next study period.

Students must successfully complete a minimum of 62.5 credits in Year 4 to be awarded the BSc in Actuarial Mathematics.

3.2 Carrying of modules

Students will not be permitted to carry modules under any circumstances.

4. Compensation

Compensation may apply, within the regulations specified in Marks and Standards, to all modules except the following:

| Module Code | Module Title | |
|-------------|--------------------------------|--|
| EF116 | Introduction to Microeconomics | |
| EF117 | Introduction to Macroeconomics | |
| MS117 | Probability 1 | |
| MS226 | Statistics I | |
| AC316 | Accounting 1 | |
| MS228 | Statistics II | |
| EF316 | Accounting 2 | |
| MS308 | Stochastic Modelling | |
| MS318 | Financial Mathematics | |
| MS338 | Actuarial Modelling I | |
| MS349 | Financial and Actuarial Models | |
| IN314 | INTRA ACM | |
| MS427 | Financial Economics I | |
| MS430 | Financial Economics II | |
| MS447 | Time Series (Intermediate) | |
| MS424 | Life Contingencies | |
| MS455 | Simulation for Finance | |

5. Resit Categories

The resit categories of modules on this programme and an explanation of those categories can be found at:

https://www101.dcu.ie/registry/module_contentsphp?function=4&programme=ACM&yr=20 23

6. Repeat Arrangements

The following modules will only be made available to repeat students registering in 2022-2023, who previously deferred or did not successfully complete the same in 2021-2022.

| MS449 | Risk Theory | |
|-------|-----------------------------|--|
| CA167 | Programming for Mathematics | |

Where students enrolled in the academic year 2021/2022 are required to repeat failed or deferred modules in the academic year 2022/2023, they take the following modules listed below:

| Deactivated Modules | Module Title | Module repeat/deferred students takes |
|------------------------|--------------------------------|---------------------------------------|
| MS428 | Financial Economics II | MS430 |
| MS448 | Life Contingencies | MS424 |
| EF113 | Introduction to Microeconomics | EF116 |
| EF114 | Introduction to Macroeconomics | EF117 |

Year 4 repeat students in 2022-2023 who must register for alternate module MS430 are permitted to accumulate additional credits up to 67.5.