1. **Title of the module**

MACT4013 (MA4513) – Actuarial Practice 1

1. **School or partner institution which will be responsible for management of the module**

School of Mathematics, Statistics and Actuarial Science

1. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**

Level 4

1. **The number of credits and the ECTS value which the module represents**

15 credits (7.5 ECTS)

1. **Which term(s) the module is to be taught in (or other teaching pattern)**

Autumn

1. **Prerequisite and co-requisite modules**

None

1. **The programmes of study to which the module contributes**

BSc Actuarial Science (including programme with a Year in Industry), BSc Actuarial Science with a Foundation Year

1. **The intended subject specific learning outcomes.  
   On successfully completing the module students will be able to:**

8.1 demonstrate an understanding of the purpose of creating and maintaining an up-to-date CV;

8.2 discuss the different roles undertaken by actuaries and the core skills required in each practice area;

8.3 discuss the uses of Microsoft Excel in the financial services market and demonstrate an understanding of the core functions used within Excel;

8.4 demonstrate an understanding of the theory of interest rates including:

i) the difference between simple and compound interest;

ii) the use of accumulation and discount factors.

8.5 demonstrate an understanding of how to use Excel cash flow models to solve elementary financial problems.

1. **The intended generic learning outcomes.  
   On successfully completing the module students will be able to**

9.1 use a logical mathematical approach to solving problems;

9.2 apply skills in written communication;

9.3 demonstrate relevant computing skills, including the use of appropriate spreadsheet software;

9.4 demonstrate an awareness of the actions required for future career development;

9.5 demonstrate independent learning and time management skills.

1. **A synopsis of the curriculum**

The aim of the module is to give students an understanding of the types of work undertaken within the actuarial profession, and a basic grounding in the core skills required by actuaries.

Indicative topics covered by the module include an overview of the actuarial profession, an introduction to Microsoft Excel, an introduction to interest rates and cash flow models. This module will cover a number of syllabus items set out in Subject CM1 – Actuarial Mathematics published by the Institute and Faculty of Actuaries.

1. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

The material is covered by bespoke handouts provided during the course, and by the Actuarial Education Company’s notes for Subject CM1 – Actuarial Mathematics 1.

1. **Learning and teaching methods**

Total contact hours: 48

Private study hours: 102

Total study hours: 150

1. **Assessment methods**
   1. Main assessment methods

Assessment 1 Career development portfolio, requiring on average between 30%

25 and 30 hours to complete

Assessment 2 In-course test: requiring on average between 20 and 25 hours to prepare 20%

Assessment 3 Timed practical assessment (Excel computing assessment): 2 hours 50%

13.2 Reassessment methods

Like-for-like

1. **Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section12) and methods of assessment (section 13)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Module learning outcome** | 8.1 | 8.2 | 8.3 | 8.4 | 8.5 | 9.1 | 9.2 | 9.3 | 9.4 | 9.5 |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |  |
| Private Study | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** |
| Lectures/exercise classes/computer classes | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** |
| **Assessment method** |  |  |  |  |  |  |  |  |  |  |
| Assessment 1 | **X** | **X** |  |  |  |  | **X** |  | **X** | **X** |
| Assessment 2 |  |  | **X** | **X** | **X** | **X** | **X** | **X** |  | **X** |
| Assessment 3 |  | **X** | **X** | **X** | **X** | **X** | **X** | **X** |  | **X** |

1. **Inclusive module design**

The School recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

a) Accessible resources and curriculum

b) Learning, teaching and assessment methods

1. **Campus(es) or centre(s) where module will be delivered**

Canterbury

1. **Internationalisation**

Actuarial Science is an international subject with techniques developed and refined by actuaries, mathematicians and statisticians across the globe. Mastery of the subject-specific learning outcomes (section 8) will help students to begin to apply the techniques of this module in a wide range of international contexts. The module team is drawn from the School of Mathematics, Statistics and Actuarial Science, which includes many members of staff with international experience of teaching and research.

Examples with an international dimension are included in the module where appropriate.

The support SMSAS provides to its students is also internationally attuned given our international student body.

**FACULTIES SUPPORT OFFICE USE ONLY**

**Revision record – all revisions must be recorded in the grid and full details of the change retained in the appropriate committee records.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date approved | Major/minor revision | Start date of delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
| 05/10/2023 | Minor | Autumn 2023 | 12 |  |
|  |  |  |  |  |