

## Principles of Engagement with Universities providing accredited Actuarial Science programmes

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### 1. What is an accredited actuarial science programme?

Accreditation of university programmes was introduced in response to the recommendations of the Morris Review (2005). The review proposed the accreditation of programmes rather than a strictly subject by subject approach to enable the Institute and Faculty of Actuaries (IFoA) to make more use of universities' expertise in teaching and research. Accredited programmes are normally actuarial science degrees or diplomas which lead to a range of exemptions providing a student achieves an overall average grade in the degree (normally 65% for undergraduate and 60% for postgraduate programmes).

The purpose of an accredited programme is to enable a university to teach a course that is equivalent to the qualification syllabus of the IFoA, as opposed to teaching an identical syllabus. This enables universities to innovate in both programme content and assessment methods – in particular assessed coursework would be a normal feature of an accredited course. As part of its annual quality assurance cycle the IFoA will attempt to identify and disseminate examples of innovative practice.

There is a formal accreditation agreement between the IFoA and the university that is subject to an annual quality assurance process with a formal reaccreditation every five years. This agreement details module content and assessment methods. Between the reviews, minor adjustments to content and assessment methods can be agreed by the Independent Examiner (IE), who is appointed by the Profession.

An important role of the IE is to work closely with the university programme team to ensure equivalence of standards, and yet give the university scope for innovation.

Further information about universities that are accredited by the IFoA is available on the website, <http://www.actuaries.org.uk/students/pages/university-courses-and-exemptions>

### 2. Requirements on universities prior to accreditation

There are a number of pre-conditions which would indicate a readiness to submit an accreditation proposal. The list is indicative rather than definitive and is not expected that all need to be in place before a submission could be considered. These include:

- There must be an identifiable actuarial programme (e.g., BSc, MSc, postgraduate diploma) which could consist of a named route or routes through a larger modular programme
- At least one full time or part-time member of the academic staff should have qualified as an actuary (it is expected that any university offering a course will have at least two full-time equivalent posts for qualified actuaries when the course is launched although this requirement would be less important if only some CT subjects are to be offered)
- The university should be able to demonstrate a capability for teaching and research in the relevant academic disciplines

- The university should be able to demonstrate a commitment to an active research agenda of relevance to the IFoA
- The university should show a commitment to supporting the actuarial programme on a long term basis and demonstrate a past interest in the provision of relevant subjects.
- The university should demonstrate a willingness to work with the IFoA to enhance actuarial education and the Profession
- The university should be willing to work with the IFoA to support students' actuarial orientation by demonstrating involvement with actuarial employer organisations.

### **3. The accreditation submission process**

#### **3.1 Accreditation submission**

An initial submission for accreditation from a university is received which includes inter alia the following material:

- Aims and objectives of the programme and a statement of why the university wants to offer an accredited programme
- Teaching and learning and assessment strategy in order to demonstrate how the aims and objectives of the programme will be met
- Syllabus content including a mapping to the equivalent IFoA syllabus and an explanation of major differences in syllabus areas covered. In particular a rationale for omitting topics that are included in the IFoA syllabus and an indication of what topics are deemed to replace them.
- At present the Profession is not prepared to offer exemption through accreditation from subjects CT9, CA2 or the SA series
- Assessment and grading processes with examples of assessments and examinations including a summary of current experience of offering examinations in relevant subjects. Except in subject CA3, assessment should be at least 70% by unseen written examinations and the whole assessment process must be equivalent to that used by the IFoA
- Existing and planned links with employers including placements (if any) in order to demonstrate employability of graduates within the Profession
- A statement of the resources available for students on the programme to demonstrate that the required standard of output can be achieved. The statement should refer to:
  - Staff CVs
  - IT facilities and student access to them
  - Library and related facilities
  - Student workloads
  - Contact hours per actuarial subject

- Entry profiles of students to the programme to enable comparison between universities on entry standard.
- Any available statistics on employment records of past students as a measure of relevance of the programme to the Profession
- A statement on how the pre-requisites for submission are met
- An overview of how the programme will be quality assured by the university.

### **3.2. Initial review of the accreditation submission**

An initial review of the material would be carried out by one or more staff actuaries and one or more volunteers with appropriate examining experience. Unless the outcome of this initial review is to reject the submission, an Accreditation Panel will be established and the steps in the following sections carried out. Any proposal to reject an initial submission must be brought to Education Committee.

In the event of immediate rejection, reasons would be given in writing to the university.

### **3.3. Accreditation pre-meeting**

Following the initial review of the submission, an Accreditation Panel, comprised of the IFA's Director of Education, Secretary of the Education Committee, a member of Education Committee or of the Board of Examiners, the Registrar or Deputy Registrar and an external academic or practitioner, will take part in an accreditation pre-meeting to discuss the submission further and to set the agenda for the accreditation meeting. Following this stage the deputy registrar will contact the university if further information is required.

### **3.4. Accreditation visit**

It is envisaged that an Accreditation Panel will visit the university for a programme level accreditation visit. At a minimum this will take half a day but it is more likely that a full day will be needed. The visit will include;

- A meeting with the management of the Faculty/School/Department
- The opportunity to review more strategic issues e.g. resources
- A meeting with the Programme Team to discuss issues of concern from the documentation submitted
- A meeting with students (on comparable courses).
- A meeting with employer contacts
- A review of resources available for the programme.

### **3.5. After the Accreditation visit**

A report of the accreditation meeting will be confirmed by the accreditation panel. This will then be sent to the university programme team for review. (Normally within 4 weeks of the

accreditation meeting) If the university team have questions or issues about the report, these will have to be resolved at first by correspondence via the deputy registrar.

Once the report is agreed the recommendation is made to the Education Committee, and the decision of the Education Committee will then be reported to the university. The decision will be:

- To approve the submission in whole or in part with or without conditions and recommendations
- To reject the submission.

If the application is rejected the Profession will write to the university stating the reasons.

If the application is approved the IFoA will appoint two IEs to oversee the programme. An accreditation agreement will be drawn up and a copy will be signed by the IFoA and by the university. Approval for accreditation will be limited to a maximum period of five years. An accreditation fee of £3000 plus VAT is charged for each accredited programme.

## **4. Requirements for accredited programmes once approved**

### **4.1. Programme syllabus**

The underlying principle of equivalence is that standards will be maintained but that coverage of content can vary. The universities will keep in mind their own academic objectives when planning their syllabuses and innovation is encouraged. The syllabus for an accredited course will be viewed as a whole and although key objectives of the professional syllabus must be covered there need not be 100% coverage, and syllabuses with greater breadth and/or depth than the professional syllabuses in some areas will be acceptable, even at the expense of other areas being treated in less detail. The extent of any divergence will be discussed and agreed at the application stage. The university will need to inform the IFoA in writing of any proposed additional significant changes and these will need to be agreed. Minor changes in any one year to the syllabus can be agreed between the university programme team and the IEs who will notify the Registry of the changes to enable a central record to be kept.

All actuarially relevant modules taught on the programme will form part of the assessed programme, and the marks will be included in the average mark required for accreditation purposes. This includes elective courses that do not map directly to a part of the IFoA syllabus. For example a course in using Excel would be included in the average, while a course in Business French would not.

Where a university runs a modular programme there may not be a one to one correspondence between the IFoA's subjects and the department's modules. If this is the case a mapping from the course modules to the IFoA's syllabuses should be provided.

The Registry will advise universities and IEs of any changes to the IFoA's syllabus.

The IFoA will consult university programme teams on any formal reviews of its syllabuses that are carried out.

The universities' views on syllabuses, where there is growing divergence from current IFoA syllabuses will be used to inform the Education Committee's thinking on syllabuses through the University Liaison Forum.

#### **4.2. Subject by subject exemptions**

As stated in section 1, the purpose of an accredited course is to allow universities flexibility and innovation in the material taught and the methods of assessment. Thus obtaining the required average mark gives students a block of exemptions. Without the benefit of the averaging some students may not have achieved all the exemptions on an individual basis.

Accreditation is therefore an "all or nothing" offering, which is unlikely to be acceptable to students. Students will not enter a course where, if they miss the average mark by 1%, they come out with no exemptions. Therefore students will demand and thus universities will offer some fall back qualification if the accreditation average is not achieved. This is likely to involve individual subject exemptions.

If subject by subject exemptions are to be considered for candidates who do not achieve the accreditation block exemptions, there will need to be a closer matching to the IFoA's syllabus. Details of the university modules that map to the Profession's examinations will be agreed at the application stage and included in the accreditation agreement. Where subject by subject exemptions are offered, the exemption mark will be set by the IFoA's appointed IEs.

#### **4.3. Style and format of accredited university programme examinations**

The IFoA's examinations have no choice of questions but the universities may, for their own purposes, wish to offer choice in their examinations. A choice of questions would not automatically preclude exemptions being granted. However it may be necessary for university examinations to indicate key topics compulsory sections or questions for those seeking exemptions.

The IE has to be confident that the university is examining the students in a professional way, e.g. coverage of the syllabus in lectures is complete even if the examination paper has some elements missing. This would be done through discussions.

The IE will check that the syllabus coverage over a number of years is appropriate and complete.

The professional examinations have papers of 3 hours each except for CA3 where the assessment involves practical presentations as well as a written paper, and takes place over a longer period. Some variation in examination duration is acceptable especially if the syllabus coverage for one professional paper is achieved over more than one university module. This will be discussed and agreed as part of the accreditation process.

The IFoA examinations have reading time of 15 minutes for the Core Applications and Specialist Technical stages examinations only. If a university offers reading time for all or for no examinations the IEs should bear this in mind when assessing the difficulty of the examination and the exemption mark for subject exemptions.

The university should be testing similar skills to the Profession's papers, i.e. knowledge, applications and problem solving skills. However, as the university papers are aimed at grading candidates whereas the professional papers are pass/fail tests, the balance of types of questions

may differ. Higher order skills might be more appropriately assessed through coursework or an extended essay.

#### **4.4. Accredited programme coursework**

- The IFoA encourages innovation in assessment methods within coursework
- Coursework where possible should assess students application of knowledge in ways not possible in a formal time constrained examination setting
- Coursework should normally be no more than 30% of the assessment for an accredited programme
- Ideally coursework should not consist entirely of group exercises, but a proportion of individual work and/or class tests should be included, to avoid unduly crediting a “sleeping partner” in a group.

Programme modules that do not map directly onto the IFoA’s syllabus, particularly optional elective courses need not be examined by a written examination. The university can propose any form of assessment that it considers appropriate.

#### **4.5. Detailed rules for accredited courses**

The following rules are applied to all accredited courses if exemptions are to be awarded though accreditation. This is not an exhaustive list, and there are specific arrangements in certain circumstances, for example if a course includes both CT and CA/ST subjects.

The student must achieve the accreditation average mark, across all actuarial modules.

The student must pass the degree or diploma for which they are registered at the university.

The student must pass all actuarial modules at the university pass mark, without taking any compensation or condonement into account.

Re-sit marks can only be counted for exemptions where the student needs to re-sit a module in order to obtain the university qualification or to progress to the next stage of the course. Students may not re-sit modules with the intention of increasing their module marks solely for subject by subject exemptions. The maximum mark for a re-sit module that can be included in the calculation of a student’s exemption mark is the pass mark.

### **5. Quality Assurance of accredited programmes**

#### **5.1. Independent Examiners**

IEs are appointed on an annual basis up to a maximum of four years. In instances where both IEs have served four years the IFoA will request that one stays on for an additional year to provide continuity.

The key role of IEs is to assure the consistency and quality of academic standards across universities and to ensure that they are comparable to the standards of the Profession’s examinations. In general two IEs are appointed for each accredited course, and in normal circumstances one would be an academic and one a practitioner.

The main task is to work with the university programme team to ensure that the accreditation agreement is being followed, and to provide advice and assistance to the university programme team. The IEs can approve minor changes to course content and assessment techniques. IEs will inform Registry of any changes agreed.

The IEs are expected to liaise with the university's external examiners regarding the assessment methods and results of the course and to attend university Exam Board meetings. It is possible for the IFoA's IE to also act as the university's external examiner.

The IEs review examination papers during the setting process, and also review a sample of scripts and coursework briefs after the examination. The aim is to ensure that the standard of student gaining exemptions through accreditation is broadly the same as the standards set by the IFA either to qualify or to move to the next stage of the examinations.

IEs are responsible for agreeing with the University the list of students who are recommended for exemptions from each accredited course. Students who are not on these lists will not be eligible for exemptions.

The IEs for all accredited courses meet together annually with the main aim of sharing best practice. All independent examiners are encouraged to attend this meeting.

## **5.2. Quality Assurance visits**

This is an annual meeting of the Deputy Registrar (Quality Assurance) and either the Director of Education or the Secretary to Education Committee with the University programme team at which issues relating to the health of the programme are discussed. These include:

- Staffing and innovation in the programme
- Any proposed curriculum changes
- Links with the Profession
- Issues arising from the annual review panel (see 6.4 below)
- Destination of graduates and proportions joining IFA
- Current research activities and future planned research
- University wide quality assurance reviews, if any
- Placements and internships for students
- Other items suggested by the university.

Time is also spent with:

- Students on the programme to investigate the student experience and discuss any points arising from the annual student survey.
- University careers staff to discuss the employment experience of graduates from the course and to ensure that links with the Profession work well

The IFoA will share the notes of the meeting with the Programme Team for their comments. The notes will form part of the annual report compiled on each accredited programme for the annual Quality Assurance Panel meetings.

## **5.3. Quality Assurance Panel meetings**

These are held annually, one for undergraduate programmes and one for postgraduate programmes. A quality assurance panel comprising the Chair of Education Committee, the Secretary of Education Committee, a member of the Board of Examiners, an IE the Director of

Education and the Registrar and/or Deputy Registrar meet to consider the performance of each course. The IEs for the programme attend by conference call.

The meeting reviews results, changes in the programme, administrative issues, the destination of past students and their subsequent success in the Profession's exams.

Issues of concern and areas of good practice are communicated to the university who are asked to respond with comments.

The Quality Assurance meetings generate a report for Education Committee.

#### **5.4. University Liaison Forum**

This is an annual meeting of the directors of actuarial science and related courses at universities. Again the main object is for universities to share best practice, but it also provides a forum to discuss proposed changes in the profession's syllabus and other matters.

### **6. Re-accreditation reviews**

Each accredited programme will be reviewed after five years, or at an earlier time as determined by the Education Committee. An Accreditation Panel, comprising the IFA's Director of Education, Secretary of the Education Committee, one of the IEs for the relevant programme, the Registrar or Deputy Registrar and an external academic or practitioner will be established for each review.

#### **6.1 Issues to be considered by the Reaccreditation Panel**

Reaccreditation Panels will review evidence on the progress of the university programme including some or all of the following:

- the outcome of the IFoA's annual reviews for the programme
- a written submission from the University addressing specific issues raised during the currency of the existing accreditation agreement
- details of changes to the programme since the programme was originally accredited
- published quality assurance material on the university from the Deputy Registrar
- the outcome of any internal reviews that are available
- statistics on the number of (overseas) students returning home; number of students who have and have not joined the Institute and Faculty
- details of graduate recruitment from the programme – essentially of home students
- feedback from employers

The Panel will also:



- review how the objectives of the Morris Review have been met through the programme, in particular, the extent to which any research done within the University has been brought into the teaching
- review the effectiveness of the University's administrative procedures and the effect these have on the IE's workloads
- meet with the university to discuss the programme including meetings with current students, relevant teaching and research staff and careers advisors as necessary.

## **6.2 Report to Education Committee**

The Re-accreditation Panel will agree a draft report for Education Committee and invite comment on matters of fact from the university.

The Panel will make recommendations to the Education Committee on the future accreditation of the programme including any conditions and/or recommendations.

The IFoA will write to the university setting out the Education Committee's decision. If the programme is being reaccredited a fee of £3000 plus VAT is charged and once received, a new accreditation agreement will be prepared and signed by the IFoA and the university.