

Memorandum

To: All Fellows, Affiliates, Associates and Correspondents of the Canadian Institute of Actuaries

From: CIA Accreditation Committee
Eligibility and Education Council

Date: December 7, 2011

Subject: **University Accreditation Program**

Document 211117

The Eligibility and Education Council (EEC) and Accreditation Committee (AC) are delighted to announce the inaugural list of Canadian universities to be accredited for courses beginning on or after September 2012.

This is an exciting moment for the actuarial profession in Canada. This ground-breaking partnership between the Canadian Institute of Actuaries (CIA) and Canadian universities will provide a richer and more rewarding university experience for students and produce qualified actuaries connected to their professional body at an early stage in their careers.

Beginning September 2012, approved universities can offer courses giving students the option of applying to the CIA to gain exemptions from writing certain Casualty Actuarial Society/Society of Actuaries (CAS/SOA) examinations leading to Associate and Fellow status in the CIA.

The option of exemptions from exams is a future-focussed initiative that will open up the profession to a broader range of potential actuaries by increasing interest in actuarial science among students across Canada, and that will create strong ties between the Institute and its newest members.

Exemptions will be possible for exams FM/2, MFE, MLC (3L of CAS) and C/4. None will be available for the Probability Exam; therefore, students will be required to complete the CAS/SOA exam for Course P/1 as well as the Fellowship exams, modules and other Fellowship requirements.

To gain exemptions, students will submit official transcripts showing they have achieved the minimum grade requirement to the CIA, along with their application and 80 percent of the corresponding CAS/SOA exam fee. There will be no grandfathering of exemptions for courses taken before September 2012 as it is not possible to assess, retroactively, the course outlines as they relate to the exam syllabus.

ACCREDITED UNIVERSITIES

The EEC and AC can today reveal that the following universities are accredited (listed in alphabetical order):

Simon Fraser University;

Université du Québec à Montréal;

Université Laval;

University of Manitoba;

University of Regina;

University of Toronto;

University of Waterloo (undergraduate and graduate program courses); and

University of Western Ontario.

Universities that did not meet the minimum requirements for accreditation received feedback on the specific areas of the University Accreditation Program (UAP) Policy which were not met, and will be encouraged to re-apply when the identified areas have been addressed. A decision not to accredit a particular university is not a reflection on the quality of that actuarial science program, but rather whether the UAP policy's minimum requirements were met.

PROCESS FOLLOWED

An application for accreditation was developed and sent to the 16 Canadian universities with actuarial programs. Applications were received from 11, seven of which are recognized by the SOA as Centers for Actuarial Excellence (CAE). Accreditation Panels (AP) were formed for each university, to conduct a site visit to verify information supplied in the application, look at exam scripts, discuss the rationale for recommended course passing grades, review historical mark distributions by course, confirm coverage of the syllabus which continues to be defined by the CAS/CIA/SOA, and meet with key faculty members and other university representatives. Each AP was charged to write a report in a standardized template to record its findings and make a recommendation.

The AC met twice in October, 2011, to develop final recommendations, and reports from the committee and individual Accreditation Panels were approved by the EEC on October 27. The council reported the results to the Board on November 29, along with a communications timeline for disseminating them to universities, members, education partners, and students.

CRITERIA FOR ACCREDITATION

The criteria for accreditation are summarized in the UAP Policy (appendix A).

NEXT STEPS

Each university will have an external examiner appointed to it for ongoing monitoring and review. In addition, the CIA will regularly communicate with the Accreditation Actuary in each university to provide support and assistance where necessary.

Additional actions must be completed to implement the program, including:

- Develop a strategy in 2012 to approach the CAS/SOA regarding recognition of CIA exemptions—many participants in the accreditation process identified mutual recognition from our education partners as a key step in the UAP's long-term success;

- Recruit and train external examiners for ongoing monitoring;
- Implement the review/monitoring cycle of accredited universities; and
- Develop administrative procedures in the CIA Secretariat.

Questions or comments may continue to be directed to: accreditation@actuaries.ca

CIA ACCREDITATION COMMITTEE

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APPENDIX A – CRITERIA FOR DECISION-MAKING

The main criteria for accrediting universities are summarized in section 3 of the UAP Policy, published in June 2011: see <http://www.actuaries.ca/members/publications/2011/211059e.pdf>.

The processes used to evaluate university applications against the policy's main areas are:

1. **Coverage of CAS/SOA syllabus.** The CAS/SOA provided learning objectives for each examination for which exemptions may be granted. The topics were reviewed by each university and the proportion of objectives covered by the courses proposed for exemption was determined. Minimum coverage of 85 percent is required.
2. **Additional material.** Where the coverage from the courses met 85 percent to 100 percent of the learning objectives, the universities indicated what additional material, if any, was covered on their courses to add value to the student's learning.
3. **Faculty.** The policy requires a minimum faculty complement to demonstrate the university's commitment to actuarial education and the program's sustainability. Typically, this anticipated a faculty with at least four full-time staff members.
4. **Actuary with fellowship designation.** At least one faculty member—typically the Accreditation Actuary—must be an actuary with a Fellowship designation, to ensure a link to the profession.
5. **Accreditation Actuary.** A CIA member with a Fellowship designation and five years of relevant experience must be identified as the Accreditation Actuary (AcA). The AcA—a position that may be filled on a part-time or consulting basis for a transitional period—will work closely with the Institute to ensure standards are maintained.
6. **Discipline.** Universities were required to have strong discipline procedures to ensure grades' continued integrity.
7. **Testing procedures.** Each course required for exemption must have at least 80 percent of the final grade coming from examination or test conditions. The number of hours of examination within the courses required for exemption must exceed the number of hours on the SOA/CAS exams.
8. **Grades.** The UAP policy dictated that the recommended course passing grades must be higher than a B-, the grade required for Validation by Education Experience (VEE) within the CAS/SOA examination structure.

The AC asked each university to provide recommended passing grades for each course required to attain an exemption from the CIA for the applicable CAS/SOA examination. For comparison purposes, they supplied historical information for the past two offerings of each course mapped to the exam syllabus on the number of students who wrote the final exam and achieved a grade of B, B+ or A-.

The AC used this information to predict the estimated maximum percentage of students who would meet the passing grade in all courses required for each CAS/SOA examination. (Typically two to three courses are mapped to each exam, requiring the student to achieve the minimum grade in every course to achieve the exemption.) This estimate was compared to the candidate passing percentage by university on the corresponding CAS/SOA examinations. The AC worked with the SOA to obtain the most

up-to-date and consistent data on passing percentages by Canadian universities, as well as for the overall population of exam writers, for its decision-making process. The AC noted that the statistics may not reflect all the students from that university writing examinations, that some students may not be enrolled in the actuarial science program but may still be writing exams, and that the statistics for some universities would be based on a rather small sample size of students.

There was a noticeable difference in success rates among Canadian universities as reported by the SOA. Accreditation Committee members attempted to recognize these factors in setting the minimum grade required for exemption for each university, and concluded:

- It would be difficult to have a single grade apply to all universities and all courses; and
- Most universities mapped two to three courses to each exam syllabus to achieve 85 percent or greater syllabus coverage, requiring a student to achieve the minimum grade in several courses in order to achieve one exam exemption from the CIA. There is a compound effect that must be considered when a student is required to achieve the minimum grade on more than one course to receive an exam exemption from the CIA.

In addition, the overall principle of keeping the final passing grades between B/70 and A-/80 was applied. The passing grades are a starting point for year 1 of the program, and passing grades and exemption percentages will be monitored yearly against early predictions to assess whether adjustments may be necessary.