

Successful Actuarial Programs: A Personal Journey

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A Personal Journey

- University of Connecticut, Storrs
 - Department of Mathematics
 - Years 2007 - present
- University of New South Wales, Sydney, Australia
 - Faculty of Commerce and Economics
 - Years 2001 - 2007
- Nanyang Technological University, Singapore
 - Nanyang Business School
 - Years 1998 - 2001

Caveats

- This talk is a reflection of my own personal view, and does not reflect the opinions or views of my past/present employers or other organizations mentioned in this talk.
- Facts and figures may have been drawn, and are available, from published websites.

UConn Actuarial Program

- Year officially established: 1976
- BA or BS, Honors; MS; PhD
- Size: 200+ undergraduates; 40+ graduates; 6-7 PhD's
- Average class size: 30-35 undergrads; 20-25 grads
- Faculty/staff: 2 tenured/tenure-track; 3-4 permanent ongoing; 4-6 adjunct
- Location: about 22 miles to Hartford; about 70 miles to Boston; about 120 miles to New York City
 - about 5,782 miles to Honolulu
 - average person can walk 35 miles in a day
 - about 160+ days to walk (except there is a big body of water)
 - about 10+ hours to fly
- Public university: top 20 US News and World Report

A Center of Actuarial Excellence

Society of Actuaries' designation of the quality of the actuarial program - an external stamp of approval of quality. Designation is reviewed periodically.

UConn was one of the first 12 schools to be provided the CAE designation in 2009.

- curriculum requirements
 - courses offered, meet learning objectives, course content
- quality of students and graduates
 - size, number of students taking/passing exams, how many receive ASA/FSA designations, hireable
- quality of faculty
 - tenured/tenure-track, ASA/FSA designations, PhDs, professional activities, research
- industry relations

The UNSW Actuarial Programme

- Year established: 1998
- Three-year programme
- Size: 300+ undergraduates; 50+ graduates; 1-3 PhD's
- Average class size: 100+ undergrads; 35-40 grads
- Faculty/staff: 5 permanent; 1-2 adjunct
- Location: nearby suburb of Sydney, 4-5 miles city center/financial district
 - major insurance companies, banks, consulting firms
- Student population: 40,000+ students

Programme accreditation

The UNSW programme was one of 4-5 universities accredited by the Institute of Actuaries of Australia.

- renewable every 4 years, with mid-review every two years.

There were strict requirements for meeting accreditation:

- overall quality of programme:
 - course content, learning objectives
 - quality of students
 - faculty and research component

Tangible benefits for accredited programmes:

- student exam exemption for courses taken and received a B or better.
- monetary benefits to the programme (today, distribution of these benefits are no longer automatic, but bid to conduct research).

The Nanyang Actuarial Programme

- Year established: unknown
- Three-year programme
- Size: 50-70 undergraduates; very few graduates (Master's by Thesis)
- Average class size: 20-25 students
- Faculty/staff: 4-5 permanent, some ongoing
- There were a separate division of actuarial science and insurance within the business school.
 - the insurance programme was eliminated
 - now actuarial is part of the division in finance
- Role of external examiner: e.g review learning objectives/textbooks, ensure quality of exam, fairness in marking

Programme accreditation

- The programme had accreditation from the UK Institute of Actuaries.
- There were requirements for meeting accreditation:
 - overall quality of programme
 - mainly meeting UK professional exam learning objectives

Tangible benefit for accredited programmes:

- student exam exemption for courses taken and received a B or better.
- no monetary benefit to the programme.

Ingredients of a successful actuarial program

- Curriculum
 - solid foundational courses (e.g. calculus, probability)
 - specialized actuarial courses (e.g. meet learning objectives)
- Quality of students: highly motivated, well-rounded
- Taking care of the students
 - teaching: quality, class size
 - student advising: courses to take, career paths
 - industry connections: fund scholarships, job placements
 - follow up once they graduate: alumni participation/input
- Quality of faculty: teaching, research, professional activities
- Reputation: years to build one
 - external stamp of approval: CAE designation, program accreditation, external examiners