

To: Senate Steering Committee

From: Senate Planning and Review Committee
Frances Jackson, Chair

Re: B.S. Degree in Actuarial Science

The Senate Planning and Review Committee (SPRC) received a request from the Senate Steering Committee to review a proposal from the Department of Mathematics and Statistics and the Department of Economics, both from the College of Arts and Sciences, to initiate a B.S. Degree in Actuarial Science. The proposed start date for this degree is Fall, 2010.

Summary

This degree will be jointly offered by both Departments. This major integrates two different disciplines and provides students with the mathematical and economic foundation for a career in actuarial science. Before graduating, students in this major will qualify to take the first two exams offered by the Society of Actuaries (SOA) and the Casualty Actuarial Society. This degree will also provide the foundation for graduate degrees in economics, mathematics, statistics or business administration. This degree requires 124 credits which includes: 32 general education credits, 61 or 62 required course credits, 12 cognate credits and the rest as elective credits. With the exception of the Risk Management course (ECN 450/APM 450), all other required courses are existing courses, currently offered to students from a variety of majors.

This program fulfills the mission of the university by enhancing an intellectual and ethical environment and preparing students to serve in local and world communities. Graduates of this program will most likely work in the insurance industry. It is projected that employment of actuaries will increase by approximately 24% between 2006 and 2016. In addition to insurance companies, actuaries are also employed in health care and by consulting firms. It is projected that this program will graduate 5 students per year. No new faculty are requested for this program. Some additional library support is requested. Also, a modest amount of money for advertising and recruitment is also requested.

Currently, OU would be the only institution in the Detroit area to offer this program as a bachelor's degree. WSU offers actuarial science as a concentration. Other universities in the state of Michigan that offer a degree with a major in actuarial science include: EMU, CMU, UM-Flint and U of M Ann Arbor. WMU, MSU, FSU LSSU and MTU offer a degree in mathematics with a specialization in actuarial science.

Strengths

SPRC identified several strengths of this proposal:

- It is a marketable program
- It is timely

- No additional money is required
- It builds on course work that is already offered
- It reflects an integrated curriculum, i.e., 2 Departments coming together. Only one additional course is needed to implement the program.
- Students will take at least 2 certification exams before graduating
- The Board of Advisors is a strong support and strength of this proposal

Concerns

Originally, SPRC had concerns regarding missing letters of support, both internal and external, whether or not there were faculty certified as actuaries, identifying the capstone course and whether or not professional ethics will be covered. Since our initial review, all of these concerns have been more than satisfactorily addressed. Additional letters of support have been provided and Dr. Theo Ogunyemi has taken and passed two of the actuarial certification exams. ECN 450 will address professional ethics and this will serve as the capstone course.

By a unanimous vote, SPRC approves of this proposal and recommends it positively for Senate action.