

Duquesne University Certificate in Actuarial Science

Approved April 28, 2016

The Certificate in Actuarial Science is an eighteen (18) credit program composed of courses from two schools: the McNulty College of Liberal Arts and the Palumbo School of Business. The certificate is available to any Duquesne University student. It is worthwhile to note two important facts about the six (6) courses that make up the Certificate in Actuarial Science:

- They already exist and are taught regularly at Duquesne.
- They can be fully accessed only through fourteen (14) additional credits of prerequisite coursework.

The courses required for the Certificate in Actuarial Science are chosen to position students for successful completion of two actuarial exams before graduation, while simultaneously giving students at least three (3) courses that count towards the Validation by Educational Experience (VEE) requirements as stipulated by the Society of Actuaries.

REQUIRED COURSES FOR THE CERTIFICATE IN ACTUARIAL SCIENCE

ECON 201	Principles of Microeconomics (<i>VEE approved</i>)
ECON 202	Principles of Macroeconomics (<i>VEE approved</i>)
MATH 301	Introduction to Probability and Statistics I
MATH 302W	Introduction to Probability and Statistics II
FINC 313	Business Finance (<i>VEE approved</i>)
FINC 338	Derivatives

PREREQUISITE COURSES FOR THE CERTIFICATE IN ACTUARIAL SCIENCE

ACCT 214	Financial Accounting
ACCT 215	Managerial Accounting
MATH 115	Calculus I (<i>4 credits</i>)
MATH 116	Calculus II (<i>4 credits</i>)

The recommended coursework sequencing to earn the Certificate in Actuarial Science is as follows:

Freshman Fall

ACCT 214
MATH 115

Freshman Spring

ACCT 215
MATH 116

Sophomore Fall

ECON 201
MATH 301

Sophomore Spring

ECON 202
MATH 302W

Junior Fall

FINC 313

Junior Spring

FINC 338

Students who follow the recommended sequencing can be ready to take the first actuarial exam (exam P - Probability) after completing MATH 301, as early as the spring or summer of their sophomore year. They can be ready to take the second actuarial exam (exam FM – Financial Mathematics) after completing FINC 313 and FINC 338, as early as the

summer of their junior year. [Students who have passed one or two actuarial exams prior to graduation are attractive to actuarial employers.]

The recommended course sequencing will also give students room in their senior year to take additional courses that, although not part of the Certificate in Actuarial Science, would qualify toward further VEE requirements (or in the case of SOCI 408 would provide germane enrichment).

SUGGESTED POST-CERTIFICATE COURESES

FINC 333	Financial Management (<i>VEE approved</i>)
ECON 381W	Econometrics (<i>VEE approved</i>)
ECON 384W	Advanced Econometrics (<i>VEE approved</i>)
FINC 336	Security Analysis (<i>VEE approved</i>)
FINC 433W	Financial Markets and Institutions (<i>VEE approved</i>)
SOCI 408	Population Methods