Undergraduate Academic Certificate in Actuarial Science
(MATH MAJOR TRACK)

Prerequisite Courses
- MATH 1710 and 1720 (Calculus I and II)
- MATH 2700 (Linear Algebra) and MATH 2730 (Multivariable Calculus)
- ECON 1100 and 1110
- CSCE 1010, 1020 or 1030 (CSCE 1040 is also encouraged, but not required)
- Either MATH 3680, ECON 4630, or DSCI 3710
- FINA 3770 -- Note that FINA 3770 has ACCT 2010/2020 as prerequisites. Students in the Actuarial Science Program who have completed both MATH 1710 and ECON 1100 with grades C or better may request a letter from an Undergraduate Mathematics Advisor allowing enrollment in FINA 3770 without having to first take the ACCT 2010/2020 prerequisites. The student is then responsible for independently learning the required accounting background.

Required Courses (MATH major track)
Math majors must take **ALL** the following economics and finance courses as requirements of the actuarial certificate:
- ECON 4870, FINA 4200, and MATH 3860 (a preparation for SOA Exam 2/FM).

Math majors must also take **THREE** additional courses selected from among the following:
- FINA 4300, FINA 4310, or FINA 4400; FINA 4310 is recommended.
- RMIN 3100 (or RMIN 2500), or any 4000-level RMIN class; recommended courses are RMIN 3100 (or RMIN 2500), RMIN 4200, and RMIN 4310. Please note that credits cannot be given for both RMIN 2500 and RMIN 3100.
- ECON 4030, ECON 4180, and ECON 4875.

Recommended Courses (MATH major track)
Math majors are recommended to take the following math classes as part of their mathematics major:
- Strongly recommended: MATH 3410, 3740, 4610, 4650.
- Recommended: MATH 3350, 3420.

Actuarial Exams
The actuarial certificate is designed to prepare students for the preliminary actuarial exams as follows:
- Exam 1/P: Math 4610. Students are encouraged to attempt this exam as soon as possible after completing Math 4610
- Exam 2/FM: FINA 3770, FINA 4210, and MATH 3860 (Financial Math)
- VEE (Validation by Educational Experience) – Economics: ECON 1100 and 1110
- VEE – Applied Statistical Methods: ECON 4870 and 4030
- VEE – Corporate Finance: FINA 3770 and FINA 4200

Additional Information and Opportunities
- Students are also encouraged to seek **internships** that may be pursued in conjunction with RMIN 4800. For more information on obtaining internships, feel free to contact the UNT Internships Office (Chestnut Hall 155, 565-2861, internships.unt.edu, internships@unt.edu).
- Students are encouraged to participate in the Gamma Iota Sigma (GIS), an international risk management, insurance, and actuarial science fraternity.
- More information about the actuarial exams, the VEE requirements, careers in actuarial science, and internship opportunities may be found at www.beanactuary.org, www.soa.org and www.casact.org.

Undergraduate Academic Certificate in Actuarial Science
(NON-MATH MAJOR TRACK)

Prerequisite Courses

- MATH 1710 and 1720 (Calculus I and II)
- MATH 2700 (Linear Algebra) and MATH 2730 (Multivariable Calculus)
- ECON 1100 and 1110
- CSCE 1010, 1020 or 1030 (CSCE 1040 is also encouraged, but not required)
- Either MATH 3680, ECON 4630, or DSCI 3710
- FINA 3770 -- Note that FINA 3770 has ACCT 2010/2020 as prerequisites. Students in the Actuarial Science Program who have completed both MATH 1710 and ECON 1100 with grades C or better may request a letter from an Undergraduate Mathematics Advisor allowing enrollment in FINA 3770 without having to first take the ACCT 2010/2020 prerequisites. The student is then responsible for independently learning the required accounting background.

Required Courses (NON-MATH major track)

Non-math majors must take **ALL** the following economics finance, and mathematics courses as requirements of the actuarial certificate:

- ECON 4870, FINA 4200, MATH 3860 (a preparation for SOA Exam 2/FM) **and** MATH 4610.

Non-math majors must also take **TWO** additional courses selected from among the following:

- MATH 3350, MATH 3410, MATH 3740, and MATH 4650; Math 4650 is recommended. (Students contemplating graduate work in computational finance should also take MATH 3410 and 3420.)
- FINA 4300, FINA 4310, or FINA 4400; FINA 4310 is recommended.
- RMIN 3100 (or RMIN 2500), or any 4000-level RMIN course; recommended courses are RMIN 3100 (or RMIN 2500), RMIN 4200, and RMIN 4310. Please note that credits cannot be given for both RMIN 2500 and RMIN 3100.
- ECON 4030, ECON 4180, and ECON 4875.

Actuarial Exams

The actuarial certificate is designed to prepare students for the preliminary actuarial exams as follows:
- Exam 1/P: Math 4610. Students are encouraged to attempt this exam as soon as possible after completing Math 4610
- Exam 2/FM: FINA 3770, FINA 4210, and MATH 3860 (Financial Math),
- VEE (Validation by Educational Experience) – Economics: ECON 1100 and 1110
- VEE – Applied Statistical Methods: ECON 4870 and 4030
- VEE – Corporate Finance: FINA 3770 and FINA 4200

Additional Information and Opportunities

- Students are also encouraged to seek **internships** that may be pursued in conjunction with RMIN 4800. For more information on obtaining internships, feel free to contact the UNT Internships Office (Chestnut Hall 155, 565-2861, internships.unt.edu, internships@unt.edu).
- Students are encouraged to participate in the Gamma Iota Sigma (GIS), an international risk management, insurance, and actuarial science fraternity.
- More information about the actuarial exams, the VEE requirements, careers in actuarial science, and internship opportunities may be found at www.beanactuary.org, www.soa.org and www.casact.org.