

Actuarial Science and Financial Mathematics FAQs

1. What is the difference between a major in Actuarial Science and a major in Financial Math?

Actuarial Science is the mathematical and statistical underpinning of the design, financing, and operation of all types of insurance, pension plans and benefit plans. Actuarial science prepares students for a career in the actuarial side of the insurance business and in actuarial consulting. Please see http://www.beanactuary.org/about/ for more information.

Financial math track provides students with a foundation of the mathematics used in financial markets. It focuses on the pricing of the financial instruments (futures, options and other derivatives) and portfolio selection. Though there are job opportunities in financial institutions for students with an undergraduate degree, students in this track are encouraged to continue with graduate study in financial math, financial engineering, computational finance, or quantitative finance (they essentially mean the same thing). There are many professional master degree programs in this area.

2. How many students are currently majoring in actuarial science at Ohio State? We have close to 350 students in our program.

3. Are there any requirements to my actuarial major? If so, what are they?

We place students into a pre-major when they switch or add this major. The major prerequisites and requirements can be found at <u>https://math.osu.edu/undergrad/current-majors/requirements/actuarial</u>.

Students will also need to complete the College of Arts and Sciences General Education requirements. Students should meet with their academic advisor in the Math Advising Office or review the requirements online, <u>https://math.osu.edu/undergrad/current-majors/requirements</u>.

4. What are VEEs?

Students and actuaries must complete Validation by Educational Experience (VEE) requirements in order to progress in their career field and be eligible for a membership in any of the actuary societies.

OSU has courses approved for Validation by Educational Experience (VEE) by the Society of Actuaries (SOA). Visit the Actuarial Science requirements from the website in #3 for the VEE course options.

5. How do students prepare to take and pass the actuarial examinations?

We have

- (Math 4530 or Stat 4201) and 4202 to prepare students for Exam (SOA P/CAS 1)
- Math 3618 for Exam (SOA FM/CAS 2)
- Math 5630 and 5631 for Exam (SOA MLC/CAS LC)
- Math 5632 for Exam (SOA MFE/ CAS 3F)
- Math 5633 and 5634 for Exam (SOA C/CAS 4)

Students who pass an actuarial science exam while in school may waive the corresponding course if not yet completed. Students would then need to replace this requirement with another course, VEE courses are good replacements.



- 6. Is it recommended that students take any of the actuarial exams while still in college? Yes, we strongly urge our students to take the exams as early as possible.
- 7. If so, how many exams are typically taken and what percent of the students pass? Most of them try Exam P and Exam FM after taking the corresponding courses. Upon graduation, more than 70% of our students have passed at least one actuarial exam; more than 50% of students have passed two or more exams.
- 8. Are there any internship programs during the school year? During the summer? Yes, but most of the internships occur during the summer. Occasionally, students continue working during the school year. More than 30 insurance companies or consulting firms come to OSU each year to recruit for their internship or full-time positions, and the number has been increasing.

9. What percent of OSU Actuarial students do an internship? More than fifty percent.

10. Where do students do their internship?

State Farm, Great American, Nationwide, Erie Insurance, State Auto, Watson Wyatt, Mercer, Towers Perrin, Milliman, Wellpoint, Findley Davies, ... and many other companies

11. What percent of OSU students work as actuaries their first year out of college?

One month before graduation, more than 70% of our students have either received full-time job offers in the actuarial industry or received admissions to graduate schools.

12. What percent of OSU students become Associates? Become Fellows?

These numbers are not currently available. It usually takes about 3 to 5 years *after graduation* for one to become an Associate and 5 to 10 years *after graduation* to become a Fellow.

13. What are the biggest reasons to choose the actuarial science program at The Ohio State University?

Quality of our program, our connection to industry, our alumni in management positions, and our approved VEE courses.