

Welcome to the

Actuarial Science Major

in the College of Computational, Mathematical, and Physical Sciences

College Advisement Center

Website: <https://science.byu.edu/advisement>
Email: cmsadvising@byu.edu
Phone: 801-422-2674
Office: N-181 ESC

Statistics Department

Website: statistics.byu.edu
Email: statsec@stat.byu.edu
Phone: 801-422-4505
Office: WVB 2152

Undergraduate Department Advisor – Kimri Mansfield

Email: kmansfield@stat.byu.edu
Phone: 801-422-4506
Office: WVB 2152D

Actuarial Advisor--Brian Hartman

Email: hartman@stat.byu.edu
Phone: 801-422-5647
Office: WVB 2193

Internship Coordinator –Kimri Mansfield

Email: kmansfield@stat.byu.edu
Phone: 801-422-4506
Office: WVB 2152D

University Career Services – Lane Muranaka

Website: careers.byu.edu (Handshake--see flyer in packet)
Email: lane_muranaka@byu.edu
Schedule an appointment: 801-422-3000 or <https://careers.byu.edu/lane-muranaka>
Office: WVB 2172

Department Student Hiring – Renea Scott

Website: statistics.byu.edu/teaching-assistant
Email: rscott@stat.byu.edu
Phone: 801-442-4527
Office: WVB 2152A

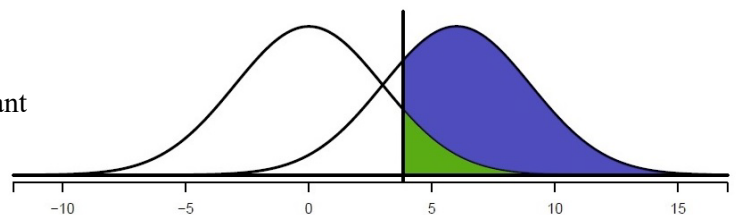
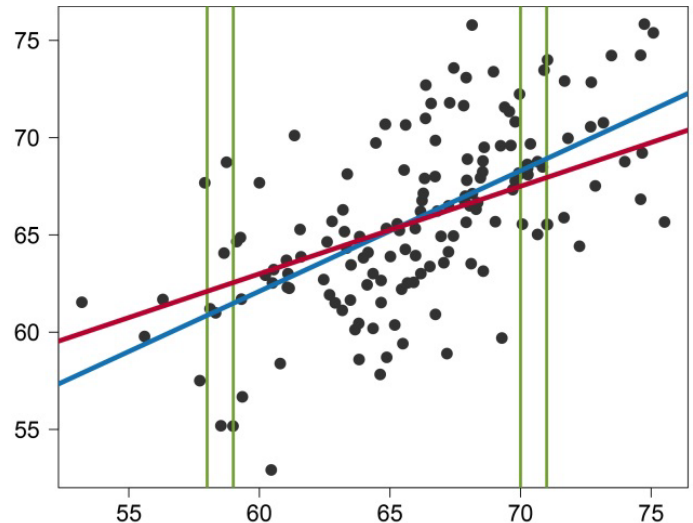
Club - Mu Sigma Rho Club, Analytics Club

Contact: Kimri Mansfield
Contact Information: WVB 2152D, 801-422-4506, kmansfield@stat.byu.edu

Club- BYU Statistics Association

Contact: Jamie Perrett
Contact Information: perrett@stat.byu.edu, 801-422-6053, <https://statistics.byu.edu/byu-statistics-association>

Learning outcomes can be found here: <https://learningoutcomes.byu.edu/Courses/program-courses/695224/Actuarial+Science+BS+/1329>



Things to Know

Resources for Graduation Planning

- Flow Charts and Major Academic Plans (MAPs) can be found here: <https://science.byu.edu/advisement/explore-majors-and-minors>.
- Academic advisors in N-181 ESC will help you understand course sequencing and help you plan classes to efficiently fill requirements. They can also help you with study skills and initial career exploration as well as connecting you with correct resources.
- Plan and register from your plan on MyMAP. Your academic advisor can help you understand how to best utilize this resource.
- Evaluate your current program. Periodically major programs are updated. An academic advisor would be happy to review the differences between the programs with you to help you determine what would be best for you.
- Consider meeting with a faculty advisor in your department. Contact info is found on the first page of this packet.

Tutoring Resources and Research

- Volunteer peer tutors are available through Y Serve if you need help with a class. Also, if you excel in a subject, consider serving your fellow students by becoming a tutor. Find out more here: <https://tutoring.byu.edu/>.
- Many departments provide TA Tutorial Labs and research opportunities. Check your department for details:
 - Chemistry and Biochemistry: C-104 BNSN, 801-422-6261, <https://chem.byu.edu/department/faculty/>
 - Computer Science: 3361 TMCB, 801-422-3027, cs-office@byu.edu
 - Geological Sciences: S-389 ESC, 801-422-3918, geology@byu.edu
 - Mathematics: 275 TMCB, 801-422-2061, office@mathematics.byu.edu
 - Mathematics Education: A180 ESC, 801-422-1735, office@mathed.byu.edu
 - Physics and Astronomy: N-283 ESC, 801-422-4361, physics_office@byu.edu
 - Statistics: 2152 WVB, 801-422-4505, statsec@stat.byu.edu

Prepare Early for a Career

- Check out Careers & Experiential Learning in 1134 WSC and at careers.byu.edu.
- Consider doing an internship.
 - Attend the STEM and Career Fairs held in fall and winter semesters.
 - Talk to your department about internship opportunities.
 - Use LinkedIn and Handshake (see flyer in this packet) to connect with alumni and apply for jobs/internships. BYU Connect is another great resource for networking (connect.byu.edu).
 - Talk with the college Career Director who can help you search for internships as well as assist you with many other career related strategies (see first page of this packet).
- Consider taking StDev 317 (Career Strategies) your junior year.
- Consider taking either Chem 502, CS 502, Geol 502, Math 502, PHSCS 502, or STAT 502 (1-credit Networking Class). Class is held for 1 hour each week.

BYU Actuarial Science

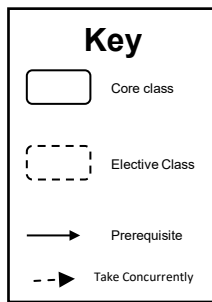
Requirements / Prerequisites

2025-2026 Academic Year

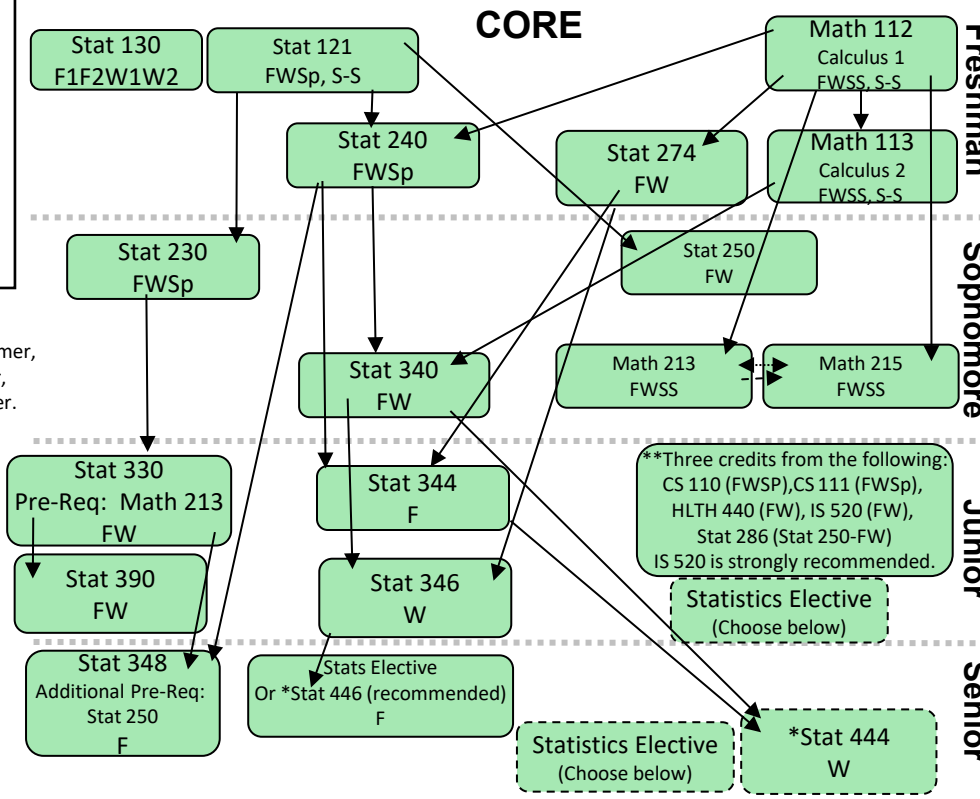
Major (58 Hours)

1. **For more information about additional exams and Validation by Educational Experience (VEE), check the MAP and the department.
2. Complete the following courses: Stat 121, Stat 130, and Stat 274
3. Complete the following courses: Stat 230, Stat 240, Stat 250, Stat 330, Stat 340, Stat 390
4. Complete the following courses: Math 112, Math 113, Math 213, Math 215
5. Complete 3.0 hours from the following courses: CS 110, CS 111, HLTH 440, IS 520, or Stat 286.
6. Complete the following three courses: Stat 344, Stat 346, and Stat 348.
7. Complete three hours from the following: Stat 444 or Stat 446.
8. Complete an additional 9 hours from the following list (courses in requirement 4 and 6 do not double count here): Acc 200, Econ 110, Fin 201, IS 515, IS 520, Stat 234, Stat 251, Stat 281, Stat 286, Stat 381, Stat 386, Stat 395R, Stat 435, Stat 437, Stat 444, Stat 446, Stat 451, Stat 466, Stat 469, Stat 482, Stat 483, Stat 486, Stat 487, Stat 495R (up to three hours), Stat 496R, Stat 497R (up to three hours total between Stat 496R and 497R), Stat 531.

* Note it is recommended that students take Econ 110, Acc 200, Fin 201 to complete the SOA VEEs. Additionally, IS 515 and IS 520 are exceptionally valuable in the daily work of an actuary.



F=Fall, W=Winter, Sp=Spring, Su=Summer, S-S=Spring-Summer, SS=Spring & Summer.



9 Hours Electives

Acc 200 FWSS Contact department	Stat 251 Pre-Req: Stat 250, Stat 240 & Math 113 FW	Stat 395R FW	Stat 451 Pre-Req: Stat 251 & 330 & 340 W	Stat 486 Pre-req: Stat 330 & 340 & 386 W	Stat 531 Pre-req: Stat 330 & Stat 340 & Math 213 Contact Department	**Actuaries are strongly encouraged to take IS 520 Guide only—please consult MyMAP for full requirements. Please Note: When Taught is subject to change Updated 7/3/2025
Econ 110 FWSS Contact department	Stat 281 Pre-Req: Stat 121 or 201 W	Stat 435 Pre-Req: Stat 330 & Stat 340 Contact Department	Stat 466 Pre-Req: Stat 251, Stat 330, & Stat 340 F	Stat 487 Pre-Req: Stat 330 & 340 & 386 F	*Take Stat 444 (W) or 446 (F). Both may be taken and the second may be used as an elective. Taking Stat 444 is preferred as it could complete an exam.	
Fin 201 FWSp	Stat 286 Pre-req: Stat 250 FW	Stat 437 Pre-Req: Stat 330 & Stat 340 W Even Years	Stat 469 Pre-Req: Stat 330 & Stat 340 W	Stat 495R Pre-Req: None When Taught: Contact Dept.		
IS 515 Pre-Req: IS 201 or equivalent FW	Stat 381 Pre-req: Stat 223, Stat 224 & Stat 330 W (contact dept.)	Stat 444 Pre-Req: Stat 340 & Stat 344 W	Stat 482 Pre-Req: Stat 286, Stat 330, Stat 340 Contact Department	Stat 496R Pre-Req: Dept. Consent (up to 3 credits) When Taught: Contact Dept.		
IS 520 Pre-Req: IS 201 or equivalent FW	Stat 386 Pre-req: Stat 121 & CS 111 F	Stat 446 Pre-Req: Stat 346 F	Stat 483 Pre-Req: Stat 482 Contact Department	Stat 497R Pre-Req: Dept. Consent (Variable) When Taught: Contact Dept.		
Stat 234 Pre-Req: Stat 121 or 201 F						



BYU's own job board. Employers who want to hire BYU graduates or offer internships to current students post job openings to this website and students apply. Just like LinkedIn, employers can view student profiles and students can network as they apply for jobs and internships



Login to handshake.byu.edu >>> BYU Net ID

**you do not need to create an account, just sign in with your BYU information*

HOW TO MAKE THE MOST OUT OF HANDSHAKE:

1. COMPLETE YOUR PROFILE

- Upload your resume and it will auto-fill in your profile
- Completed profiles tailor your Handshake experience
- Information from your transcript is already uploaded
- Fill in the Summary/Bio section
- Fill in your past jobs and experiences, including all the bullet points you use on your resume
- Add a professional headshot and background photo

Remember: every word in your profile will be searchable by students and employers

4. EXPLORE FELLOW STUDENTS

- “Students” tab
- Search for fellow BYU students to view their profiles and job positions.

5. ATTEND EVENTS

- The “Events” tab will be your key to attending info sessions, interviews, and Career Fairs
- The “Calendar” tab under “Events” will show you what events are coming soon
- Make sure to save events you are interested in or RSVP so you do not forget to attend
- Spread the word to your friends on social media

6. DOWNLOAD HANDSHAKE APP

- Search: “Handshake” not “Handshake Career Services”
- Input your BYU e-mail address: netID@byu.edu (it will forward emails to the e-mail you have on file with BYU)
- Handshake will send you a link via e-mail to enable your account in the app
- Navigate the app to perform all the functions of the website that have been previously mentioned

7. VISIT THE CAREER STUDIO

- Freshen up your resume, cover letter, or LinkedIn
- Receive networking help
- Practice interviewing with a mock interview
- Meet with a full-time Career Director in your field

8. GET A JOB, RING THE BELL

- Once you're hired, stop by the Career Studio to ring our Victory Bell and get a picture for the Victory Board



employers are
5X MORE LIKELY
to view a profile that has
at least one job/skill/organization

2. APPLY FOR JOBS

- Search for job titles, employers, or skills
- Apply for interesting jobs that meet your skill set

3. RESEARCH COMPANIES

- Under the “Jobs” Tab there is an “Employers” Tab
- Search for keywords or locations to find companies that are the right fit for you
- Plan to attend their info sessions on BYU Campus, connect with them at Career Fairs, or set up informational interviews to learn more

Remember: when looking at companies or jobs, Handshake will tell you what other BYU students have worked there. Use this resource to network and discover more information!

BE AN ACTUARY.

WHAT IS AN ACTUARY?

We manage risk.

The future is uncertain and full of risk. Risk is the chance that an undesirable event will occur, but risk is also opportunity. That's where we come in.

Actuaries are experts in:

- Evaluating the likelihood of future events—using numbers, not crystal balls.
- Designing creative ways to reduce the likelihood of undesirable events.
- Decreasing the impact of undesirable events that do occur.

We are the leading professionals in finding ways to manage risk. It takes a combination of strong analytical skills, business knowledge, and understanding of human behavior to manage today's complex risks facing our society.

A TOP-RANKED JOB

It only makes sense that Actuary is a top-ranked job. We earn high incomes and enjoy a harmonious work/life balance. Our work is intellectually stimulating. And we work in a variety of settings. But no matter where we work, this career comes with one great perk: the satisfaction of solving problems and having an impact.

US News and World Report, the Jobs Rated Almanac, CNN Money, and others all agree: few other occupations offer the combination of benefits that an actuarial career can offer.

In almost every category, such as work environment, employment outlook, job security, growth opportunity, and salary (especially salary), a career as an Actuary is hard to beat.

ACTUARIAL EXAMINATIONS

Actuaries in the U.S. and Canada achieve professional status by passing a set of examinations and completing other requirements prescribed by the Casualty Actuarial Society (CAS) or the Society of Actuaries (SOA).

Unlike other professions, such as law and medicine, most actuarial candidates receive on-the-job training while completing the examination process. Employers are invested in your success and many give candidates study time during working hours, pay exam fees, and award raises for each exam passed. Most employers do prefer to hire candidates who have started the series of examinations on their own and have already passed at least one or two exams.



SALARY AND BENEFITS

Earn while you learn.

Actuaries are well compensated. Experienced Fellows have the potential to earn from \$150,000 to \$250,000 annually, and many actuaries earn more than that.

Compensation may vary significantly according to years of experience, industry, geographic region, and responsibilities. For example, an actuary with a Fellowship designation working as a financial manager in the banking industry could earn a higher salary than another Fellow working in the health insurance industry.

Average starting salary (1-2 exams passed)	\$45-65,000
Average salary after 5 years (3-4 exams passed)	\$55-90,000
Average salary after 10 years (Associates)	\$90-165,000
Average salary after 10 years (Fellows)	\$150-250,000

Note: Compensation may vary significantly according to years of experience, geographic region and responsibilities.

PREPARING TO BE AN ACTUARY

If you want to be an actuary, start preparing now!

HIGH SCHOOL

- Follow a college preparatory curriculum of high school classes.
- Take math classes every year.
- Take advantage of Advanced Placement (AP) and advanced courses such as statistics and calculus.
- Enroll in computer science courses to develop your computer skills.

COLLEGE

- Aim for a broad-based education that concentrates on mathematics and business (with a finance emphasis).
- A degree in math, statistics or actuarial science is helpful, but don't rule out a major in other subjects like economics, business, liberal arts, or finance. A double major is not necessary, but it might be a plus.
- Whatever your major, it is essential to have a strong mathematical background. Your curriculum should include courses such as calculus, probability, statistics, and any courses your school offers in actuarial science.
- Business courses, such as finance, accounting, management, economics, and computer science, will increase your career options.
- Courses in English, speech, and business writing will help you acquire the communications skills actuaries need.
- Because actuaries are involved in a growing variety of social and political issues, courses in the social sciences and humanities will help round out your capabilities.

Want to learn more?
Visit BeAnActuary.org today!



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