

Welcome to the
Actuarial Science Major

in the College of Physical and Mathematical Sciences

College Advisement Center

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

Statistics Department

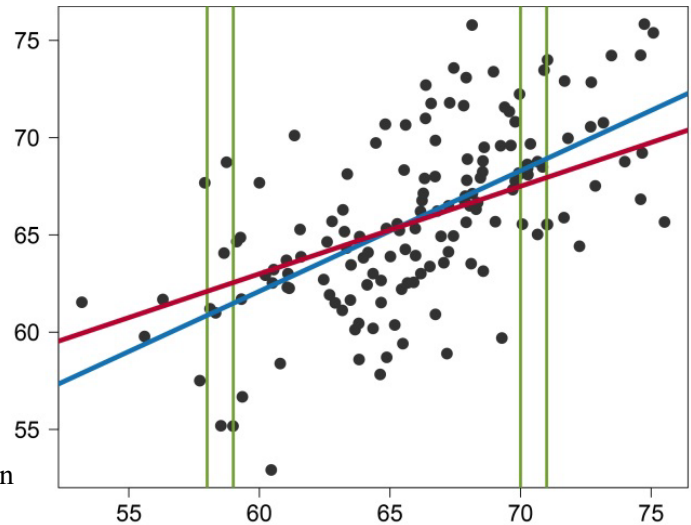
Website: statistics.byu.edu
Email: statsec@stat.byu.edu
Phone: 801-422-4505
Office: WVB 2152

Faculty Advisor – Del Scott

Email: scottd@byu.edu
Phone: 801-422-7054
Office: WVB 2152B

Assistant Actuarial Program Coordinator—Allie Tomlinson

Email: tomlinson@stat.byu.edu



Actuarial Advisor--Brian Hartman

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

Internship Coordinator –Kimri Mansfield

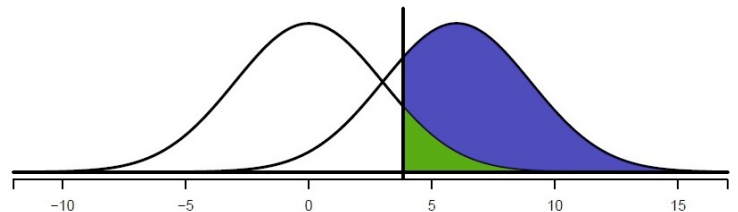
Email: kmansfield@stat.byu.edu
Phone: 801-422-4506
Office: WVB 2152D

University Career Services – Lane Muranaka

Website: careers.byu.edu (Handshake--see flyer in packet)
Email: lane_muranaka@byu.edu
Phone: 801-422-9360, or 801-422-2674 (schedule appointment)
Office: N221-J ESC

Department Student Hiring – Brandon Smith

Website: statistics.byu.edu
Email: bsmith@stat.byu.edu
Phone: 801-442-4527
Office: WVB 2152E



STEM Alliance--Connect with STEM employers, mentors, and clubs: stemalliance.byu.edu

Club - Mu Sigma Rho Club, Analytics Club

Contact: Kimri Mansfield

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

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/flowcharts>.
- 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 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-100 BNSN, 801-422-3667, <https://www.chem.byu.edu/>
 - Computer Science: 3361 TMCB, 801-422-3027, csoffice@cs.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: 167 TMCB, 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 University Career Services in 2590 WSC and at <https://ucs.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 Job Search Class). Class is held for 1 hour per week for eight non-consecutive weeks throughout the semester.

BS in Actuarial Science (695224) MAP Sheet

Physical and Mathematical Sciences, Statistics

For students entering the degree program during the 2022-2023 curricular year.



University Core and Graduation Requirements	Suggested Sequence of Courses																																																																																																							
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Jesus Christ and the Everlasting Gospel	1	2.0 from approved list																																																																																																						
Foundations of the Restoration	1	2.0 REL C 225																																																																																																						
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<p>Note 1: Students should take STAT 130 the semester they declare themselves as a Statistics Major.</p> <p>Note 2: The sequence of courses suggested may not fit the circumstances of every student. Students should contact their college advisement center for help in outlining an efficient schedule.</p> <p>Note 3: Students are encouraged to complete an average of 15 credit hours each semester or 30 credit hours each year, including spring and/or summer terms, to meet the 120 credit minimum needed to graduate. Taking fewer credits substantially increases the number of semesters to graduate.</p> <p>Note 4: Open elective credits can be classes of your choosing, classes for a minor, or credits that have already been earned through AP classes, transfer credits, etc.</p>																																																																																																								

BS in Actuarial Science (695224)

2022-2023 Program Requirements (56.5 Credit Hours)

<p>Students must pass one exam of the Society of Actuaries (SOA), usually Exam FM, before declaring an actuarial science major. Students should declare another statistics emphasis until they pass an exam (Applied Statistics and Analytics offers an unofficial pre-actuarial path with early courses).</p> <p>REQUIREMENT 1 Complete 3 courses</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">STAT 121 - Principles of Statistics</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 130 - Introduction to the Department of Statistics</td> <td style="text-align: right;">0.5</td> </tr> <tr> <td>STAT 274 - Theory of Interest</td> <td style="text-align: right;">3.0</td> </tr> </table> <p>REQUIREMENT 2 Complete 5 courses</p> <p>STATISTICS CORE COURSES:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">STAT 230 - Statistical Modeling 1</td> <td></td> </tr> <tr> <td>STAT 240 - Probability and Inference 1</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 250 - Applied R Programming</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 330 - Statistical Modeling 2</td> <td></td> </tr> <tr> <td>STAT 340 - Probability and Inference 2</td> <td style="text-align: right;">3.0</td> </tr> </table> <p>REQUIREMENT 3 Complete 4 courses</p> <p>MATHEMATICAL FOUNDATION COURSES:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">*MATH 112 - Calculus 1</td> <td style="text-align: right;">4.0</td> </tr> <tr> <td>MATH 113 - Calculus 2</td> <td style="text-align: right;">4.0</td> </tr> <tr> <td>MATH 213 - Elementary Linear Algebra</td> <td style="text-align: right;">2.0</td> </tr> <tr> <td>MATH 215 - Computational Linear Algebra</td> <td style="text-align: right;">1.0</td> </tr> </table> <p>REQUIREMENT 4 Complete 3.0 hours from the following course(s)</p> <p>RECOMMENDED COURSE: ACTUARIAL SCIENCE MAJORS SHOULD TAKE IS 520, BUT ALL OF THE COURSES ARE VALUABLE.</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">C S 111 - Introduction to Computer Programming</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>HLTH 440 - Introduction to Statistical Computing in Epidemiology (SAS)</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>IS 520 - Business Programming and Spreadsheet Automation</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 286 - Data Science Ecosystems</td> <td style="text-align: right;">3.0</td> </tr> </table> <p>REQUIREMENT 5 Complete 3 courses</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">STAT 344 - Foundations of Long-term Actuarial Mathematics</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 346 - Foundations of Short-term Actuarial Mathematics</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 348 - Statistics for Risk Modeling</td> <td style="text-align: right;">3.0</td> </tr> </table> <p>REQUIREMENT 6 Complete 3.0 hours from the following course(s)</p> <p>NOTE: IF BOTH COURSES ARE TAKEN IN REQUIREMENT 6, ONE CAN BE USED AS AN ELECTIVE IN REQUIREMENT 7. STUDENTS INTERESTED IN LIFE, FINANCE, OR PENSIONS SHOULD TAKE 444 AND THOSE INTERESTED IN HEALTH OR PROPERTY/CASUALTY SHOULD TAKE 446.</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">STAT 444 - Advanced Long-term Actuarial Mathematics</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 446 - Advanced Short-term Actuarial Mathematics</td> <td style="text-align: right;">3.0</td> </tr> </table>	STAT 121 - Principles of Statistics	3.0	STAT 130 - Introduction to the Department of Statistics	0.5	STAT 274 - Theory of Interest	3.0	STAT 230 - Statistical Modeling 1		STAT 240 - Probability and Inference 1	3.0	STAT 250 - Applied R Programming	3.0	STAT 330 - Statistical Modeling 2		STAT 340 - Probability and Inference 2	3.0	*MATH 112 - Calculus 1	4.0	MATH 113 - Calculus 2	4.0	MATH 213 - Elementary Linear Algebra	2.0	MATH 215 - Computational Linear Algebra	1.0	C S 111 - Introduction to Computer Programming	3.0	HLTH 440 - Introduction to Statistical Computing in Epidemiology (SAS)	3.0	IS 520 - Business Programming and Spreadsheet Automation	3.0	STAT 286 - Data Science Ecosystems	3.0	STAT 344 - Foundations of Long-term Actuarial Mathematics	3.0	STAT 346 - Foundations of Short-term Actuarial Mathematics	3.0	STAT 348 - Statistics for Risk Modeling	3.0	STAT 444 - Advanced Long-term Actuarial Mathematics	3.0	STAT 446 - Advanced Short-term Actuarial Mathematics	3.0	<p>REQUIREMENT 7 Complete 9.0 hours from the following course(s)</p> <p>NOTE: COURSES USED TO FULFILL REQUIREMENTS 4 AND 6 WILL NOT DOUBLE COUNT HERE. NOTE: NO MORE THAN 3.0 HOURS OF ANY COMBINATION OF STAT 496R AND STAT 497R CAN BE USED FOR THIS REQUIREMENT.</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">ACC 200 - Principles of Accounting</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>ECON 110 - Economic Principles and Problems</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>FIN 201 - Principles of Finance</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>IS 515 - Adv Spreadsheets Bus Analysis</td> <td></td> </tr> <tr> <td>IS 520 - Business Programming and Spreadsheet Automation</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 234 - Methods of Survey Sampling</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 251 - Introduction to Bayesian Statistics</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 286 - Data Science Ecosystems</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 381 - Statistical Computing</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 386 - Data Science Process</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 395R - Special Topics in Applied Statistics</td> <td style="text-align: right;">3.0v</td> </tr> <tr> <td colspan="2"><i>You may take up to 3 credit hours.</i></td> </tr> <tr> <td>STAT 435 - Nonparametric Statistical Methods</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 437 - Applications in Biostatistics</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 444 - Advanced Long-term Actuarial Mathematics</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 446 - Advanced Short-term Actuarial Mathematics</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 451 - Applied Bayesian Statistics</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 466 - Introduction to Reliability</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 469 - Analysis of Correlated Data</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 482 - Data Science Capstone 1</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 483 - Data Science Capstone 2</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 486 - Machine Learning</td> <td style="text-align: right;">3.0</td> </tr> <tr> <td>STAT 495R - Special Topics in Statistics</td> <td style="text-align: right;">3.0v</td> </tr> <tr> <td colspan="2"><i>You may take up to 3 credit hours.</i></td> </tr> <tr> <td>STAT 496R - Academic Internship: Statistics</td> <td style="text-align: right;">9.0v</td> </tr> <tr> <td colspan="2"><i>You may take up to 3 credit hours.</i></td> </tr> <tr> <td>STAT 497R - Introduction to Statistical Research</td> <td style="text-align: right;">3.0v</td> </tr> <tr> <td colspan="2"><i>You may take up to 3 credit hours.</i></td> </tr> <tr> <td>STAT 531 - Experimental Design</td> <td style="text-align: right;">3.0</td> </tr> </table> <p>Recommended Courses: Students should take Econ 110, Acc 200, and Fin 201 to complete the Society of Actuaries VEEs. Additionally, IS 515 and IS 520 are valuable in the daily work of an actuary.</p>	ACC 200 - Principles of Accounting	3.0	ECON 110 - Economic Principles and Problems	3.0	FIN 201 - Principles of Finance	3.0	IS 515 - Adv Spreadsheets Bus Analysis		IS 520 - Business Programming and Spreadsheet Automation	3.0	STAT 234 - Methods of Survey Sampling	3.0	STAT 251 - Introduction to Bayesian Statistics	3.0	STAT 286 - Data Science Ecosystems	3.0	STAT 381 - Statistical Computing	3.0	STAT 386 - Data Science Process	3.0	STAT 395R - Special Topics in Applied Statistics	3.0v	<i>You may take up to 3 credit hours.</i>		STAT 435 - Nonparametric Statistical Methods	3.0	STAT 437 - Applications in Biostatistics	3.0	STAT 444 - Advanced Long-term Actuarial Mathematics	3.0	STAT 446 - Advanced Short-term Actuarial Mathematics	3.0	STAT 451 - Applied Bayesian Statistics	3.0	STAT 466 - Introduction to Reliability	3.0	STAT 469 - Analysis of Correlated Data	3.0	STAT 482 - Data Science Capstone 1	3.0	STAT 483 - Data Science Capstone 2	3.0	STAT 486 - Machine Learning	3.0	STAT 495R - Special Topics in Statistics	3.0v	<i>You may take up to 3 credit hours.</i>		STAT 496R - Academic Internship: Statistics	9.0v	<i>You may take up to 3 credit hours.</i>		STAT 497R - Introduction to Statistical Research	3.0v	<i>You may take up to 3 credit hours.</i>		STAT 531 - Experimental Design	3.0	<p>THE DISCIPLINE:</p> <p>An actuary is a statistician who analyzes the financial consequences of risk. Actuaries use statistics, mathematics, and financial theory to study uncertain future events, especially those of concern to insurance and pension programs. They evaluate the likelihood of those events and design creative ways to reduce the likelihood and decrease the impact of adverse events that do occur. Their work designing and managing programs that control risk requires a combination of strong analytical skills, business knowledge, and understanding of human behavior.</p> <p>CAREER OPPORTUNITIES:</p> <p>Actuaries enjoy excellent job security, high incomes, and a low-stress work environment. Careers in actuarial science are consistently ranked among the top professions. Competent actuaries are highly recruited and can have many professional opportunities. Actuaries are employed across a wide variety of industries and typically become established in one of the following career tracks: health, property/casualty, or life insurance, consulting to one of those industries, enterprise risk management, quantitative finance and investment management, or retirement benefits. By focusing on the development of data analysis skills, actuaries can also easily transition to business analytics settings</p> <p>ACTUARIAL EXAMS:</p> <p>Actuaries are required to demonstrate their proficiency by passing a series of competency exams offered by one or more of the principal actuarial societies. It typically takes 6-10 years to pass all of the exams; most actuarial interns are required to have passed at least one of these exams as a condition for employment. The BYU Actuarial Science degree provides students with the opportunity to study significant portions of the material covered in the first eight exams accepted by the Society of Actuaries and six accepted by the Casualty Actuarial Society (the two major actuarial societies in the United States).</p> <p>The correspondence between the actuarial exams and available BYU course work is roughly as follows:</p>
STAT 121 - Principles of Statistics	3.0																																																																																																					
STAT 130 - Introduction to the Department of Statistics	0.5																																																																																																					
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BS in Actuarial Science (695224)

2022-2023

Joint SOA/CAS Exams:

Exam P: Stat 240, 340 (full coverage)

Exam FM: Stat 274 (full coverage)

SOA Exams: Exam FAM: Stat 344, 346 (full coverage)

Exam SRM/PA: Stat 330, 348 (full coverage)

Exam ALTAM: Stat 444 (full coverage)

Exam ASTAM: 446 (full coverage)

Exam ATPA: Stat 251, 330, 348, 451 (some coverage)

CAS Exams:

Online Course 3: Stat 330, 348 (full coverage)

MAS-I: Stat 348 (full coverage)

MAS-11: Stat 251, 348 (full coverage)

Exam 5: Stat 346, 446 (some coverage)

In addition to the exams the societies accept the following sets of courses for the Validation by Educational Experience (VEE) credit:

Mathematical Statistics VEE: Stat 121, 346

Finance and Accounting VEE: Fin 201, Acc 200

Economics VEE: Econ 110

MAP DISCLAIMER

While every reasonable effort is made to ensure accuracy, there are some student populations that could have exceptions to listed requirements. Please refer to the university catalog and your college advisement center/department for complete guidelines.

DEPARTMENT INFORMATION

Department of Statistics

Brigham Young University

2152 WVB

Provo, UT 84602

Telephone: (801) 422-4505

FACULTY ADVISOR:

Del T. Scott

2152B WVB

Brigham Young University, Provo, UT 84602

Telephone: (801) 422-7054

ADVISEMENT CENTER INFORMATION

Physical and Mathematical Sciences College Advisement Center

Brigham Young University

N-181 ESC

Provo, UT 84602

Telephone: (801) 422-2674

BYU Actuarial Science

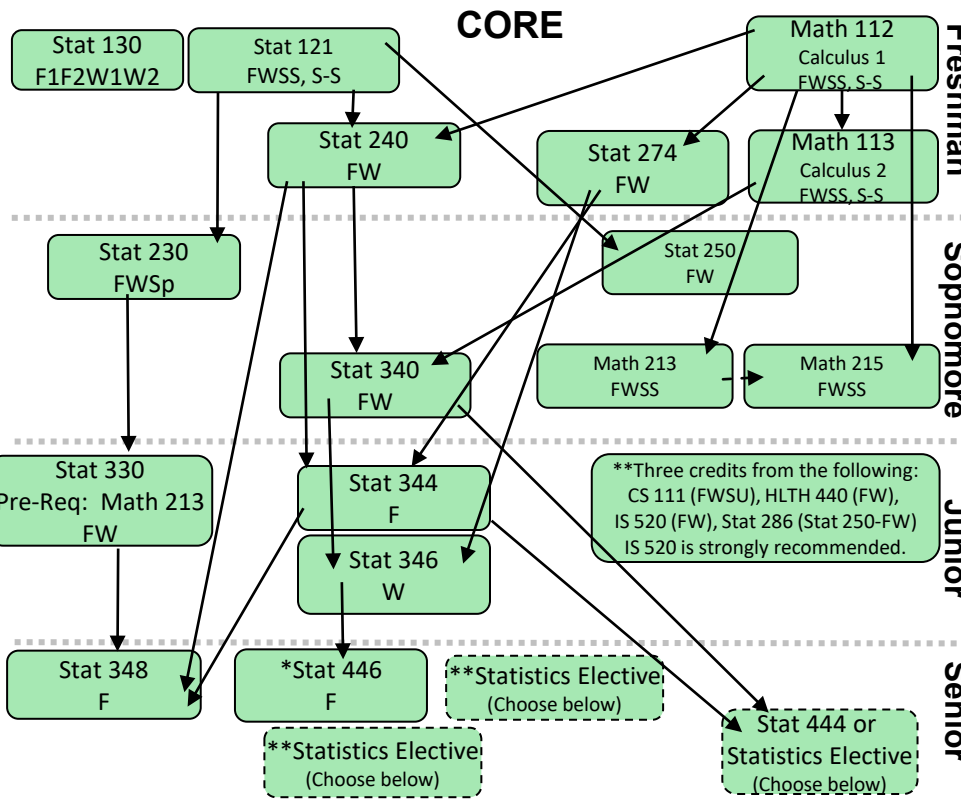
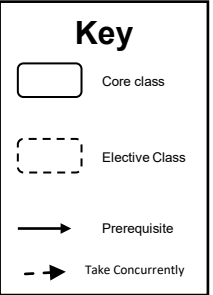
Requirements / Prerequisites

2022-2023 Academic Year

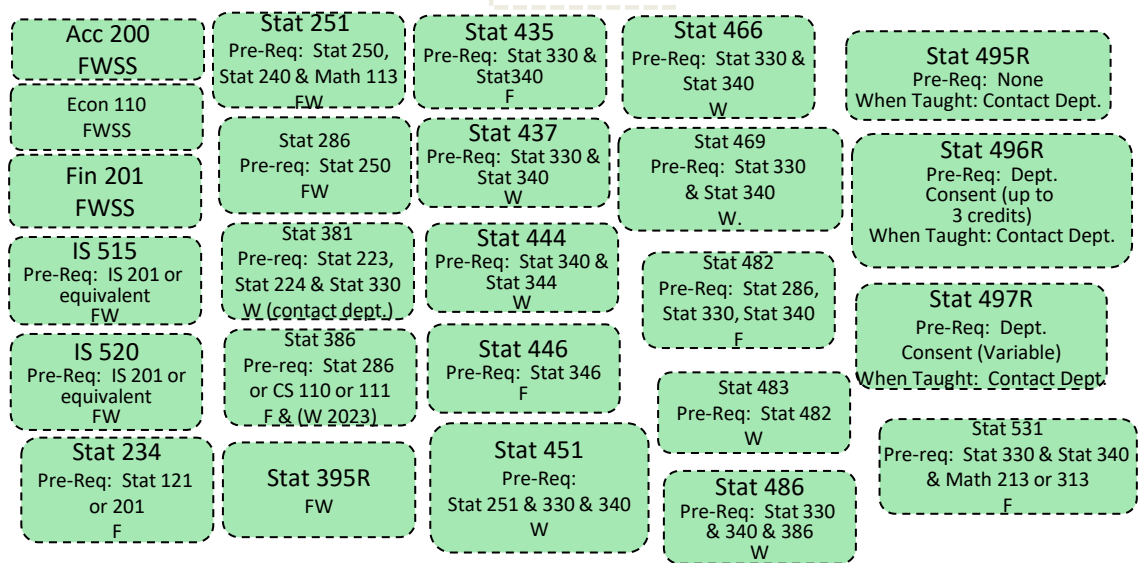
Major (56.5 Hours)

- Students must pass one exam of the Society of Actuaries (SOA), (usually the FM exam, but may also be P Exam) before admittance into the major.
Exam P: Stat 240, 340 (full coverage)
Exam FM: Stat 274 (full coverage)
**For more information about additional exams and Validation by Educational Experience (VEE), check the 2022-2023 MAP
- Complete the following courses: Stat 121, Stat 130, and Stat 274
- Complete the following courses: Stat 230, Stat 240, Stat 250, Stat 330, Stat 340
- Complete the following courses: Math 112, Math 113, Math 213, Math 215
- Complete 3.0 hours from the following courses: CS 111, HLTH 440, IS 520, or Stat 286.
- Complete the following three courses: Stat 344, Stat 346, and Stat 348.
- Complete three hours from the following: Stat 444 or Stat 446.
- 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 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 495R (up to three hours), Stat 496R (up to three hours), Stat 497R (up to three hours), 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.



9 Hours Electives



*Take Stat 444 (W) or 446 (F). Both may be taken and the second may be used as an elective.

**Actuaries are strongly encouraged to take IS 520

Guide only—please consult MyMAP for full requirements.

Please Note: When Taught is subject to change

handshake

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 you 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 (Facebook stalking... “networking”)

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 Counselor 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!



BE AN ACTUARY.

Follow us:

