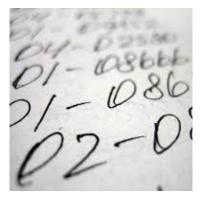
# Risky BUSINESS







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Congratulating a Fellow

Part-Time Job Opportunities

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...and More

## From the Actuarial Program Director

I am excited to share news about our actuarial program with students, alumni, employers, donors, prospective students, and friends.

Following advice and encouragement from our actuarial studies advisory council, the actuarial program and mathematics department approved changes in our Bachelor of Science in Mathematics: Option I: Actuarial Science that will go into effect for students entering under the 2016-2018 catalog. Actuarial class requirements will encompass all of 329F, 339D, 339J, and 339U plus at least two from 339V, 339W, and 349P, as well as at least one of 339C, 339V, 339W, 349P, 349R, and 378K. These changes represent an increase of two actuarial-specific classes. Our proof-based math class requirement can be met with either 325K or 328K. Foreign language is no longer required. Students will need at least 120 semester hours. Our goal is that these requirements will better serve students wishing to become practicing actuaries.

We expect students who decide on not preparing for the actuarial profession to opt for the much more flexible Bachelor of Science in Mathematics: Option VII: Mathematics degree. All actuarial classes will count toward the mathematics degree requirements.

This summer 2015, our program assistant director, Alisa Walch, completed all fellowship requirements of the Casualty Actuarial Society and is now a fellow in the Casualty Actuarial Society (FCAS). Congratulations! Alisa has been quite busy these past few years serving as assistant director, earning an ACAS summer 2014, serving

on the CAS case studies committee, and designing and offering M339C: Actuarial Case Studies this fall. We are planning on offering the case studies class each fall in order to prepare our students for entry-level actuarial work (while also improving communication and presentation ability).

In 2014-2015, our major was a popular choice with 85 students graduating with our actuarial degree (about 35% of all math graduates).

We have been able to add Dr. Joel Nibert to our actuarial teaching faculty. Joel, a PhD in Probability and Stochastic Processes from the University of Southern California, is teaching Interest Theory this fall and is scheduled to teach a section of M339J next fall. Please join us in welcoming Joel.

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From the contributions of several former students, we are pleased to learn that contributions for the Jim and Ann Daniel Scholarship AND the Alumni Scholarship have met the minimum threshold to endow. These endowments are being established and we will be able to begin offering awards next year. The program and our students will benefit from these

endowments in perpetuity. We would like to see these endowments grow substantially. If you are interested in contributing to our program, please consider a gift to the Daniel or Alumni scholarship. I am certain that a contribution form will accompany this newsletter.

Finally I would like to thank our newsletter editor, Jason Rossiter, and his staff for creating another splendid edition of Risky Business. All former editions are posted at www.ma.utexas.edu/dev/actuarial/Risky Business.

Suggestions from alumni on the best way to educate future actuaries and other program advice are always welcome. Please send an email to: Maxwell@math.utexas.edu.

-Maxwell

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## Congratulations In Order

#### Casualty Actuary Society Welcomes One of Our Own



Photo credit: Craig Huey

Q: What inspired you to become an actuary?

Q: Could you share some of your study habits and your preparation process for the CAS examinations? *Risky Business* would like to congratulate Professor Alisa Walch, UT's Actuarial Program Assistant Director, who recently received her FCAS certification.

After majoring in mathematics at Texas Christian University, Walch continued on to UT for a Master of Actuarial Science. Walch's extensive education and work experience grant her a unique perspective to share with students and help her encourage them to think critically about the many subjects she teaches. We had an opportunity to speak with her, and she shared a bit with us about how she worked toward her latest certification and how she applies her experiences in the classroom.

A: I had a professor at TCU who talked about actuarial science and described it as being an applied field of math with a pretty good salary.

A: My study habits have changed over the years. The process I used for preliminary exams (focusing on a study manual and drilling practice problems) didn't work for the upper-level exams, where the syllabus material is a compilation of papers (Exam 6 had 67 papers on it, I think) and the questions are free-response instead of multiple choice.

The first thing I would do is get organized. That meant printing out all of the syllabus material and putting it in binders, ordering my study kit, ordering a study manual and online seminar, and setting up my study schedule (I'm more than happy to share my excel study schedule template with students!)

Once I was finally ready to start studying, my goal was to make at least three full passes through the material. The first pass was a "quick" read through all of the source material just to familiarize myself with the topics. The second pass was with the study manual/online seminar and was slower and more in depth. This is when I would make all of my note cards and would work practice problems after every section, excluding any practice problems from the most recent two exam sittings. My third pass was another "quick" one and was all about putting the big picture together, trying to see relationships between concepts. Once I was done with my third pass of the material, I would start taking practice exams and would review material I was weak on... Every time I made it through my full process, I passed.

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Q: Have you made any changes to your original study habits as you progressed through the CAS track? A: Yes, absolutely! One of the big changes was figuring out how to focus on concepts and relationships instead of trying to memorize formulas. I was lucky to pass Exam P, but I had to take Exam FM twice before I figured it out. Once I understood what the present value of an annuity-immediate actually represented instead of treating it as a formula to just plug numbers into, the material made so much more sense. That's a skill I wish I had learned much earlier and been able to apply more to my undergraduate studies.

My study habits also changed quite a bit when I got married. I'm a bit of a night owl and can really get in my study zone late at night. Before I was married, it was common for me to study until three or four in the morning, falling asleep with my study materials on the bed with me. I pretty much had them with me 24/7. After I got married, I had to work at finding more of a balance and designating time away from studying.

Over time, I also learned the importance of taking care of myself during intense study seasons. I felt better if I made time to work out and eat healthily, which helped me be more productive while studying and at work.

Q: What aspect of actuarial science do you enjoy most, and how did that influence your decision to pursue the CAS track?

A: One thing that really attracted me to the field was the continuing education aspect. I loved that there was still a lot to be learned after college. Believe it or not, I actually enjoyed studying for exams. I didn't necessarily enjoy the intensity required for studying, and I definitely didn't enjoy taking the exams themselves. But a lot of the exam topics are interesting, and I enjoyed expanding my knowledge base.

The P&C industry is dynamic. There are new risks emerging and actuaries today have to figure out what to do about them, and we can't rely on what was done in the past because these risks didn't exist in the past. This means that the learning and innovating never stops. To me, that's very exciting.

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Q: Based on your experience, what does it take to be an actuary and what are some qualities of successful actuaries?

A: One thing you have to do is pass exams, which requires a huge amount of dedication and sacrifice. Even though a lot of companies offer paid study hours, you will still have to sacrifice a lot of your personal time. And it'll be hard for your non-actuarial friends and family to understand that. There were a lot of trips and activities that I had to pass on, because I couldn't afford the time away from studying.

Actuaries have to be able to think independently and analytically. It's not about following directions and having everything spelled out for you. If that's all the job was, then anybody could do it. Being an actuary is about problem-solving, filling in the blanks, and coming up with your own directions.

Being a successful actuary also means excelling at the soft skills. Professionalism, communication, presentation skills, leadership, etc. It's not enough to just be good with the numbers. Companies want full package employees.

Q: What do you know now that you wished you knew when you were in college?

A: So much. One of the main things I wish I knew in college was how to learn and how to study. I was great at seeing patterns and memorizing, so I didn't have to try very hard in my lower-level classes. Even though I was successful in those classes, I missed out on the big ideas. And when I was finally challenged in my upper-level classes, I didn't know what to do. I wish I had the study skills that I have now to apply to those classes.

Q: What are your goals when teaching your classes, and what are your expectations from students?

A: Some of my goals are to get students to focus on the logic behind the math, to challenge them, and to make them think. All of these goals are really aiming at the same thing: preparing students to become successful actuaries. I believe that my job is about more than just teaching the subject material. It's also about preparing students for life after college.

We would like to congratulate Professor Walch as well as thank her for sharing her experiences with us!

Interviewed by Sachin Chandiramani

### +numbers talk

## MSBA Program Offers Experience With Big Data

Students interested in developing abilities in data analytics and widening their skill sets should consider the Masters of Science in Business Analytics (MSBA) program here at UT. Eligible applicants must meet the following criteria: an undergraduate degree from an accredited institution; mathematical aptitude and quantitative and/or technical training in coursework; strong communication skills and motivation; and an upper-division GPA of 3.0 or higher. This is a great program for students looking for experience in big data analysis.

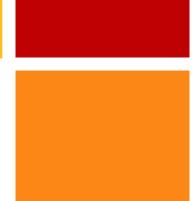
The growing demand for expertise in business analytics is apparent in many different industries, including consulting, retail, financial services, marketing, healthcare, and technology. This one year program focuses on the science of translating vast amounts of complex data into manageable information for making sound decisions. The benefits of studying in this graduate program include networking opportunities, analytical training, and programming skills.

The industrial involvement in this Masters program is tremendous. Industrial leaders such as Deloitte Consulting and Walmart are the founders of the Executive Council. Top companies such as Accenture, HP, American Airlines, Dell, USAA, Southwest Airlines and more are leading industrial councils that provide real case studies for students to analyze. These companies are looking for students who can tell a story about the data, communicate results effectively, and help them visualize the analysis in a manner that is easily understood.

All graduate students in the program attend the same classes at the same time, which allows them to learn together as well as share their own expertise.

"The culture [of the program] is not competitive at all," said Kevin Gregory, former Actuarial Science Club President and current student in the program. "It's about team-building, sharing ideas, and bonding. All the graduate students in the program benefit from working together on these projects because we are able to build long-lasting relationships. The program allows us to collaborate with each other because everyone has different knowledge about each industry and we exchange ideas."

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Not only is the Business Analytics program a chance to build teamwork skills, but it is also a great opportunity to learn cutting-edge knowledge. The modern information environment generates massive amounts of data from transactions, business interactions, social exchanges, and sensors. This program prepares individuals to use these data by providing courses such as Data Management, Business Data Analytics, Predictive Modeling, Time Series, and the Business Intelligence Capstone.

Despite the challenging courses in the curriculum, Gregory, who graduated from UT with a B.S. in Mathematics, said that the Actuarial Science Program prepared him well for this Masters program. Its students primarily use programming languages R, SQL, and Python, which actuarial students learn about in their M349R (Applied Regression and Time Series), MIS 302 (Foundations of Information Systems), and CS 303E (Elements of Computers and Programming) classes.

This one-year Masters degree gives students opportunities to meet company representatives, collaborate with each other, receive the latest industrial information, and gain hands-on programming experience. For an actuarial student who may not be interested in the exams necessary once out of college to be a full-fledged actuary, the Master of Science in Business Analytics is an exciting opportunity to prepare for work in similar fields. Career paths

available to MSBA graduates include: consulting practices, strategy operations, business intelligence, and various forms of analytics. With companies such as Deloitte creating new roles specifically for Business Analytics graduates, new opportunities are appearing every day for actuarial students in many fields.

For more information regarding this program, please visit: https://www.mccombs.utexas.edu/Business-Analytics or contact MSBusinessAnalytics@mccombs.utexas.edu. -Jenny Guo







The Society of Actuaries held its annual Candidate Connect event at the Austin Convention Center in October, and many students from UT's actuarial science department were in attendance. The event, which encompasses multiple lectures on current industry innovations, included presentations across multiple fields as well as a luncheon where students and other candidates networked with board members such as current SOA President Craig Reynolds (above, right). Pictures from SOA Candidate Connect Online: October Issue 3



"I like that I can give students feedback on their work so that they know where they went wrong, and as a last bonus, it pays pretty well!"

-Senior Allison Barry, Grader

## **Job Opportunities for Actuarial Students**

UT has some great options for students looking for a part-time job that incorporates the math involved in actuarial classes. Ronda Hall, a CNS academic advisor, and Tan Thai, the undergraduate program coordinator, send out an email to math majors at the beginning of each semester in regards to recruiting Learning Assistants and Graders for undergraduate math classes. Those with questions about this opportunity can stop by the advising office in the RLM building to learn more.

A Learning Assistant, one of the part-time jobs mentioned above, is

similar to a Teaching Assistant (TA) but it's a more hands-on experience and open to undergraduate students. I was a learning assistant for two semesters of Calculus II. I attended the lectures where I helped students with questions. I also attended discussion sections and the CalcLab, a place for students to come get help with homework or any other questions. Through this, I was able to stay fresh with my calculus skills and get experience teaching. In the actuarial world, and especially in actuarial consulting, being able to teach and explain things at a high level is very important.

Students interested in these opportunities can drop in to the CNS advising office (RLM 4.101) or visit the website: https://www.ma.utexas.edu/about/jobs/ where they can learn about requirements and apply online.

Another part-time job at UT involves grading for a math class. Grading is done independently, in your own spare time, and work is submitted to the professor. Similarly to Learning Assistants, graders keep their math skills up to date while earning money.

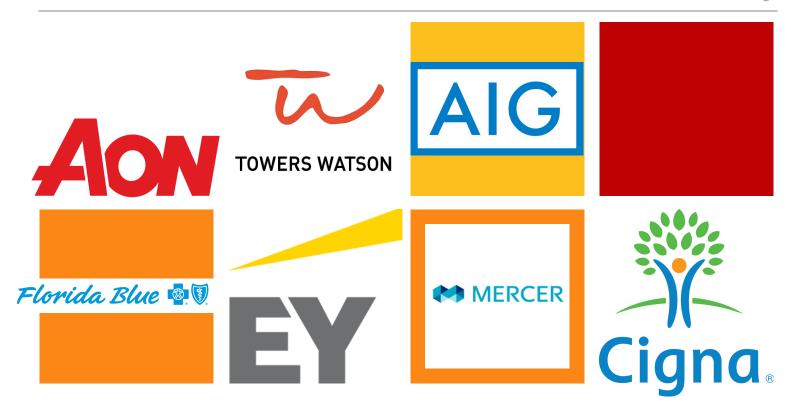
"Being a grader is great because I get to do work on my own time with a professor who trusts me to get the job done," said Allison Barry, a grader for Probability.

"I like that I can give students feedback on their work so that they know where they went wrong, and as a last bonus, it pays pretty well!"

Having a part time job at the University is a great experience. Getting to work with and help teach other students is the perfect way to 'pay it forward' and share some of your own knowledge and tips about the Actuarial Science major.

-Jessica Hastings





#### Fall 2015 Career Panel

#### Various Employers Answer Questions, Share Tips

As is now tradition, the Actuarial Science Club (ASC) hosted an actuarial career panel in the evening following the College of Natural Science's Career Fair. Representatives from AIG, Cigna, Florida Blue, Aon Hewitt, Mercer, Towers Watson, and Ernst & Young (EY) all graciously shared their wisdom and perspectives on both their respective companies and the industry as a whole. Pizza, as is also tradition, was provided.

The first question asked of the panel was how the actuarial departments fit into their parent companies. The representatives touted the importance of their teams, with

Aon Hewitt's representative saying actuaries make up the "bread and butter" of Hewitt's work and deliverables. Mercer, Towers Watson, and EY all chimed in to say that actuaries provide the groundwork for any client team. The insurance companies present—Cigna, Florida Blue, and AIG—said that the actuaries are generally the first people contacted whenever new numbers come in; actuaries can act as the face of the entire company whenever executives ask questions or seek clarification.

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When asked what tools and software the various companies used, Excel was the ubiquitous answer. Every actuary present spent most of his or her day in Excel, with many companies having their own actuarial function specific add-ins for the software. Retirement consultants in particular also used some form of valuation software to quickly summarize pension plan liabilities or view any of the almost infinite paths a plan participant can take to retirement, but some firms bought software from an outside developer while others created in-house, proprietary systems.

The age-old question on the difference between insurance and consulting was raised next. The consulting firms stressed the uncertainty of their days. It is an odd day in the office if everything goes as expected. Clients can call at any time to request special projects or discuss unique quirks of their plans. They also pointed out that if someone has interest in moving into other forms of consulting at any point in the future, it would be more difficult to do so from a position in insurance than from one in actuarial consulting. On the insurance side, AIG's representative said that an insurance actuary can, much of the time, be a consultant whose clients are internal. Unique projects and the occasional tight deadline exist in both fields.

The questions asked about whether actuaries are too reliant on computers and what students new to the work force would need to know in order to succeed yielded similar answers. In both cases, every company stressed the importance of under-

standing the foundation of the work being done. The successful actuaries are the ones who ask questions when they do not understand where a number came from or how it was created. Mercer said that, while "the wheel has already been created," referring to work done in the previous cycle of valuations, actuaries need to understand why work was done that way and should find out how to do work this year even more efficiently. EY warned of the "battle of the millennials" where young people may be too wired in to their computer systems and need to hone the soft skills that a computer cannot replicate which are still important in any profession.

The last question of the night was, "What keeps you at your company?" The general sentiment, eloquently put by Mercer's representative, was that "people are the reason we choose our jobs." An actuarial company will do work very similar to that of its competitors: the determining factor once someone has decided which general path to follow will almost always be the culture and people in the office one may spend years in. Florida Blue's repreenioved the sentative familyoriented culture that spilled out bevond the 9-5 spent in the office. Aon Hewitt's representative appreciated how the company focused strongly on retaining long-term employees, and EY's representative was drawn to the company by its commitment to grow its employees as individuals.

The actuarial panel has become a staple of ASC's fall calendar, and this year's was no disappointment. Inquisitive students, ASC officers, and actuarial faculty at UT all appreciate the candor and approachability of



"The successful actuaries are the ones who ask questions when they do not understand where a number came from or how it was created."

the representatives from all of the companies that attended. Lastly, Risky Business would like to again thank AIG, Cigna, Florida Blue, Aon Hewitt, Mercer, Towers Watson, and Ernst & Young for all the time and effort they put in to providing information and support for UT's actuarial program.

-Jason Rossiter

### + How to Become a Chartered Risk Analyst

## Exploring the CERA certification

A chartered enterprise risk analyst, or CERA, is nothing short of one of the most important titles coming up in conversations about modern day risk management. Whether it be in business, insurance, technology, or elsewhere, CERAs are taking on important roles around the globe, changing the way we think about managing risk. But what exactly is a chartered enterprise risk analyst and what do they do?

Firstly, a CERA is an actuary who demonstrates strong personal communication and business skills as well as the technical skills required to be an actuary. They need to have an in-depth understanding of business activities as well as be able to communicate complex, hyper-technical ideas effectively to non-actuaries. In short, they play the roles of both actuaries and business people, using risk management to make judicious business decisions.

Secondly, a CERA is not just an empty title, it is a certification with credentials and requirements, just like an Associates of the Society of Actuaries Certification. There are exams that need passing, seminars that need attending, and even courses that need taking before certification. And yes, you *can* still work towards your FSA when first getting your CERA.

In order to receive a CERA certification, one must pass exams P, FM, MFE, C, and the Enterprise Risk Management Exam, which is taken in lieu of exam MLC. One also needs the same Validation by Education Experience, or VEE, credits that the ASA requires. There is also a self-paced, Elearning course called Fundamentals of Actuarial Practice, FAP, which teaches candidates about the business environment. Also online, the Enterprise Risk Management Module will introduce candidates to ERM topics such as evaluating a risk management framework, regulatory requirements, and economic capital. Lastly is the the Associateship Professionalism Course, which is a half-day seminar covering professionalism, ethics, and legal liability.

More information on these requirements can be found







"In short, they play the roles of both actuaries and business people, using risk management to make judicious business decisions."

on www.ceranalyst.org/exam-overviews.asp.

More and more actuaries are expanding into fields outside of insurance, and CERAs are leading the way into the new frontier. A CERA can work in various industries such as investments and banking, technology, ecommerce, government institutions, and energy. Getting CERA certified broadens horizons and opens up many working opportunities as an actuary.

They are also highly respected and sought after by employers. Shinichiroh Choh, a CERA staff actuary at Meijiyasuda Life Insurance Company in Japan, says on ceraglobal.org, "In my company, the expectation for CERA is very high, and important tasks are assigned to CERAs, so it drives CERA numbers to higher growth."

CERAs are in demand and held in high esteem inside and outside of the actuarial world, and, with the increasing connections between industries, certification may open many doors to a young actuary.

-Julia Ware

## +internship experience

### A Summer in Insurance, by John Stark

Valking into the first day of your first internship is nervewracking. You may feel unprepared, you may feel as if you don't know many people, or you may be overwhelmed by a building that you are unfamiliar with. I experienced all of these feelings as I checked in at security on the first day of my internship at USAA. Luckily, I believe that many of your coworkers and superiors will realize that you feel that way—at least, that was my experience.

The first couple days of my internship were orientation. We were seated at tables with the fellow interns that we would be working most closely with. We learned about USAA's culture, including the mission and core values of the company, and participated in some interactive activities that helped us get to know our fellow interns better. After ori-

entation we were introduced to our supervisor, with whom we would be working with closely for the next nine weeks. He showed us the floor we would be working on and introduced us to every single person on it; it took a couple hours and was exhausting, but it made me feel more at home. Over the next couple weeks, my initial concerns were eliminated systematically. We had daily training sessions in which we covered actuarial foundations. (M 339J, M 349P, and at times R M 357E were quite relevant in these sessions, so pay attention in class!) In between these sessions, we had a scavenger hunt that helped us get familiar with the building, and we also had a couple of mock projects to get our feet wet.

As a result of all of these activities, I was feeling confident when the time came to start on my real

project for the summer. However, being confident does not mean you know everything; the project was still a challenging and learning experience. As I encountered struggles, I worked closely with a mentor who would sometimes give me a nudge in the right direction and sometimes let me struggle a bit longer if he knew I could solve the problem alone. I also met with my supervisor once a week to discuss my goals (and whether I was achieving them), how things were going with my mentor, and any concerns I had.

At the end of the summer, despite all my trepidations, I finished my project and confidently sent it off to the Department of Insurance to be reviewed. Therefore, if you're pursuing an internship this summer, my advice to you is: It's OK to be nervous; I was, too.



#### Welcome to the A-Team!

Doctor Joel Nibert has joined the actuarial department, which he has dubbed the "A-Team," this semester and is currently teaching ACF 329 (Interest Theory) which he will continue in the spring.

Nibert taught M 358K (Applied Statistics) the year of 2014-2015. "I love M 358K! That's one of my favorite classes," he exclaims.

Doctor Nibert received his PhD in Probability and Stochastic Processes from the University of Southern California. His interests lie in Probability, and next fall he will be offering M 339J (Probability Models with Actuarial Applications). Let's all give Dr. Nibert a warm welcome!

## +internship experience

### A Summer in Consulting, by Edward Zhao



came away from my summer internship at Towers Watson with two lessons that I felt were really important. The first is that no matter what your background is, asking questions and being proactive are the best ways to learn during your internship and build connections with others at the company. The second lesson I learned is that working in consulting is absolutely fantastic.

On my first day at the job, I received a folder with a short list of onboarding instructions and tutorials on how to familiarize myself with the intranet that the employees use. I was also assigned a "buddy" who introduced me to everyone in the office and took me out for lunch. After that, I was on my own! The freedom to set my own goals and work style were extremely unfamiliar to me. I ended up reaching out for work to multiple project managers and consultants in the office, most of whom were happy to spend the time to include me on their project team and teach me the skills I needed to perform my job well. Because I

was eager to learn and ask questions about the health care industry, I absorbed a great deal of knowledge about insurance plans, pharmaceutical industry trends, government reform, and so much more.

I was also caught off guard by how willing everyone was to mentor me throughout my internship. Analysts, consultants, and pharmacy specialists—coworkers at all levels of experience—were able to spare fifteen to thirty minutes of their day to explain a project or actuarial concept to me. The first analyst I met taught me how to extract new client data, run it through an Excel model, and draw my own conclusions. A project manager showed me where to find historical client information and use it to produce exhibits for client meetings. The consultant that I worked with the most spent several of her valuable hours explaining pricing models, actuarial plan values, and industry characteristics to me. The friendliness and willingness to teach that was displayed at the office was one of the reasons that I fell in love with consulting.

During my internship, I was able to work on several projects with different client teams. The one that I got most heavily involved with focused on health care pricing updates and strategy for a mid-size retail client. Being able to see the entire process from start to end and participate in client communications was a valuable learning experience. I was able to attend a face-to-face client meeting, and I realized that working for a client isn't like preparing a PowerPoint deck and giving a

presentation; instead, it's much more similar to a dialogue between two equal parties. In consulting, you adapt your work to your clients' needs and preferences, allowing you to look at each project with a new perspective. The diversity of the work is one of the many aspects that drove me to pursue a career in consulting.

I would encourage students studying actuarial science to look at consulting firms as well as insurance companies when considering internships for the summer. I've talked with consultants that have work experience in both fields and feel strongly that each path provides its own set of opportunities to learn. Whichever path one chooses, there's no doubt that you'll be able to apply what you've learned in school and grow as an actuarial student.



"In consulting, you adapt your work to your clients' needs and preferences, allowing you to look at each project with a new perspective."

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# **Graduate Level Statistics**

### Programs Offer Exposure to Advanced Models

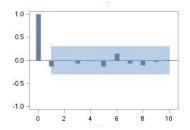
ctuarial students who are interested in a deeper understanding of statistics may be interested in the graduate level statistics programs offered at UT since both the graduate work in statistics and actuarial science in general emphasize advanced mathematics and statistics. The master's and PhD programs in statistics are open to students who want to further pursue an education in the application and theory of statistics. The master's program is a two-year program that can be taken in two different tracks. Track A is offered to students who are pursuing a master's degree in statistics and students who are pursuing a doctoral degree other than statistics. Track B is offered to students who were originally from the PhD statistics program that want to transfer to the master's program. In addition to a master's report, which is similar to a publishable journal article in both quality and length, both tracks require thirty-two hours of approved coursework that emphasizes both the theory and application of statistics.

Whereas the Master's program mainly focuses on the theory and application of statistics, the PhD program focuses on students' training to become researchers on the theory and methods of statistics. A distinct quality of this program is the focus on many diverse topics that can be explained by statistics, such as biology, education, government, economics, and computer science. Actuarial students who take advantage of what the PhD program has to offer will be immersed in various probability models and modern computational statistical programs and tools. Many tools, programs, and ideas taught in the PhD program, such as R and Monte Carlo method, can be applied to everyday work in the actuarial field.

The PhD program is a four-year program that is similar in structure to the master's program in statistics but with six more hours in another significant subject and a dissertation. At the end of the first year, students must take a written preliminary exam that assesses their knowledge in the course material. At the end of the second year, students must take an oral candidacy exam, which assesses their research proficiency. After all coursework and dissertation requirements are completed, a final thesis defense is required.













In addition to the enrollment in the masters or PhD program in statistics, students also have the option to apply for the semester long Graduate Fellows Program, which provides training and experience in statistical analysis, consulting on applications in various topics, and new statistical methods. Actuarial students interested in becoming skilled actuarial consultants may find this program very appealing to them. Upon completion, students will have knowledge to present and communicate advanced statistical models and the confidence to teach themselves whatever statistical methods necessary for any variety of technical consulting positions.

-Kevin Yin

### + what's new?

### University Sponsorship to Benefit Club Members

This school year, there have been two major changes in how the University of Texas Actuarial Science Club operates. First, as you can see from the new title of the organization, the club is now university sponsored. Second, the club has a new official faculty advisor: Professor Alisa H. Walch, FCAS.

Senior and Club President Alex Shirsat, previously the Administrative Director and Vice President, spent a lot of time working with the Dean of Students to make the actuarial club a sponsored student organization. No substantive changes needed to be made to how the club organized events or interacted with faculty because the club was already being run the way that sponsored clubs run. As an officially sponsored organization, the club is required to have a faculty advisor, a role that Dr. Mark Maxwell, the Actuarial Science Program Director, had fulfilled in the past.

As a sponsored club, there are three new changes that students will notice. First, there is more freedom to make updates to the University website (www.ma.utexas.edu/dev/asc). Previously, the website could not be changed significantly because it was on the university domain, but now that the club is university sponsored, it is more open to feedback and improvement. Second, now that the club is sponsored, companies are allowed to recruit directly at meetings. This is a huge benefit to stu-

dents, as they can now hand their resumes directly to employers. Lastly, the club now has a financial account through the university. This means that all funds have to go through the university. Students can see this change when they write checks to the University of Texas as opposed to The Actuarial Science Club for dues or study manual rentals.

Having Professor Walch as an official sponsor also adds several benefits. Although Dr. Maxwell had previously been acting as an advisor to the club, Walch is the perfect fit for the role this year. In order to be a sponsored club in the university, the club must have an advisor who is supervised by another faculty member. As Maxwell is the Actuarial Program Director and Walch is the Actuarial Program Assistant Director, Walch is a natural fit as the faculty advisor for the organization. Walch is actively involved in the club and regularly communicates with Shirsat about club events with employers. More resources are available to students now that the club has a faculty advisor, such as the ability to book rooms for meetings and other events like the Employer Panel.

With these changes, the club is headed in a positive direction. Stay tuned for a great year for the University of Texas Actuarial Science Club!

-Allison Barry







Senior Kylie Chesser meets with mentees Samantha Hart and Huyen Pham to discuss courses before spring registration. *Photo credit: Antonette Masando* 

"The program is structured to be very flexible ... The amount of participation is really up to each pair."

-Senior and Program
Coordinator Emily Bell

## **Mentorship Program Benefits Students**

A new school year has brought with it a new mentorship program complementing the Actuarial Science Club. This initiative is intended to help ease new students into the actuarial program at UT and the actuarial field in general.

The mentorship program pairs more experienced students in the club with younger students who may just be starting out on the actuarial path. Over 60 students have signed up for the program, with some mentors having multiple mentees, so there are currently 34 pairs. The mentors are a great resource for anyone who may be unfamiliar with signing up for classes, studying for actuarial exams, or searching for an internship.

"The program is structured to be very flexible. The minimum amount of participation is a meeting once a month. However, the amount of participation is really up to each pair," said Actuarial Science Club Events Coordinator Emily Bell. "I think that is ideal situation for everyone since we all have a lot going on. I know for me, I talk to my mentees about once a week."

Additionally, the program allows the mentors to become more involved in the club and guide young and potentially anxious underclassmen who are uncertain of what their next step in the major may be. This program is similar to most actuarial internships that pair new, less experienced students with more knowledgeable actuaries who help show them the ropes.

While there are no explicit requirements to be a mentor, prospective mentors are asked about exam or internship experience when applying in order to best pair them with mentees.

"Mentors are required to have at least one exam passed or internship experience," Bell said. "The ideal mentor is an upperclassman who has both."

Bell anticipates that the program will continue to grow and become a staple in the Actuarial Science Club. While it is too soon to say what impact the mentorship program has had on the club, many of the participants are excited to be able to participate. UT alum have even shown interest, leading the ASC officers to consider expanding the mentorship program to allow for participation from former club members and their companies.

"This is the first year, so there is always room for growth," Bell said. "Ideally, the program will continue on and expand over each semester."

-Grace Hseu

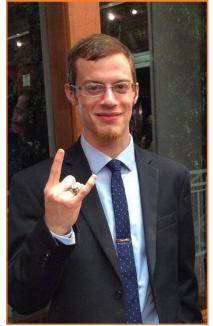


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Events Coordinator: Emily Bell (Above, Right)
Administrative Director: Jenny Guo (Right)



#### Probability, P

Emily Stuber, Senior

Weston Hartzell, Junior

Justin Park, Sophomore

Dani Diehl, Sophomore

Ryan Gold, Sophomore

Samantha Hart, Sophomore

Christian Barrera, Senior

Diego Rodriguez, Junior

Kate Ewald, Junior

Kevin Yin, Senior

Kevin Chiu, Senior

Sahit Reddy, Junior

Jenny Guo, Senior

#### Models for

Life Contingencies, MLC

Michael Luo, Senior

#### Financial Mathematics, FM

Emily Bell, Senior

Stephanie Lowe, Senior

Aman Parikh, Senior

Jenny Guo, Senior

Hillary Regan, Junior

Rebecca Huizinga, Master's

Allison Barry, Senior

Rob Bumbarger, Senior

Ana Gonzalez, Junior

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#### Financial Economics, MFE

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Emily Bell, Senior

Sarah Fife, Senior

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Endowed Scholarship in Actuarial Studies

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James Morris Dial

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Bruce Fuller Jr.

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Emily Bell

John S. Rudd Jr.

Endowed Scholarship in Actuarial Studies

Ana Gonzales

Kylie Chesser

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TDI Internship / Scholarships

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