



# UW ACTSCI CLUB

Winter 2018 Newsletter, February Edition

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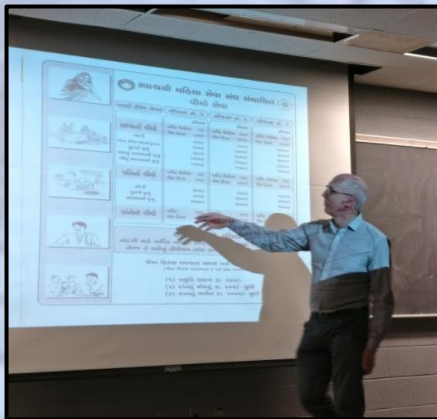
# RECAP OF PAST EVENTS

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## What Canada Can Learn from Microinsurance, Denis Garand

*Wednesday February 7*

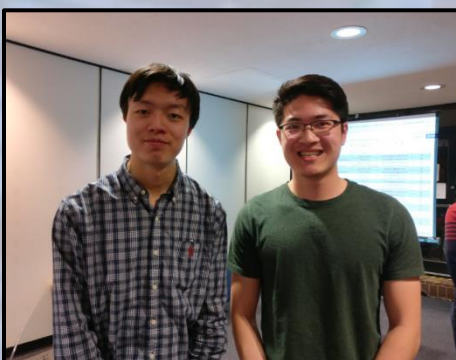
Students came out to learn about the growing field of microinsurance and its place in the Canadian insurance industry. The talk was given by industry expert Denis Garand and was a very informative overview of microinsurance basics and its implementation strategies. Attendees also enjoyed some delicious shawarmas!



## Industry Overview

*Wednesday February 14*

At Actsci Club's Industry Overview session, members had the chance to learn about all the opportunities available in the Actuarial industry. Panel speakers with experience in Life and Health, Consulting, and P&C facilitated an informative discussion with Actsci students, followed by a Q&A session. Actsci Club mentors and mentees also had the opportunity to mingle over some delicious deli sandwiches!



# RECAP OF PAST EVENTS

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## **Excel Tutorial** *(cohosted with FARMSA and UWFA)*

*Thursday February 15*

Members of Actsci Club, FARMSA, and UWFA came out to strengthen their knowledge of this highly-demanded technical skill. Beginners learned all that Excel has to offer – everything from VLOOKUP to Solver – while intermediates and Excel professionals brushed up on their existing skills. Attendees also enjoyed some good ol' treats from Tim Horton's!



## **VBA Tutorial** *(cohosted with FARMSA)*

*Thursday March 1*

Members of Actsci Club and FARMSA attended the VBA Tutorial session to learn a new technical skill becoming more and more popular among many employers in actuarial science, finance, and risk. Presented by Actsci Club's very own Tim Huang and Tina Huang, attendees learned the fundamentals as well as some advanced features of this highly demanded skill, while enjoying some snacks from Math C&D.



# SOA Student Outreach Day

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The UW Actsci Club is very excited to announce perhaps the biggest event of this term! The SOA Student Outreach Day is an amazing opportunity for members to gain a deeper insight into the actuarial profession as well as connect with SOA representatives!

**Date/Time:** Saturday March 3, 3:00 – 6:30 PM

**Location:** University Club

**Dress Code:** Business Casual

**Agenda:**

- A kick-off presentation given by the **President of SOA**, Mike Lombardi
- Panel discussion and Q&A session with several SOA representatives
- Several different activities to engage in with SOA representatives and Actsci Club Executives – including Actsci Jeopardy and Poker!
- Top-of-the-line food catering by University Club, including: breaded shrimp, battered mushrooms, popcorn lobster, lightly-breaded chicken tenders, corn tortillas, and assorted crisp vegetables

It's not everyday that the President of SOA makes an exclusive trip to UW. So cross March 3 off your calendars and come out to this amazing event to obtain firsthand information and advice from industry experts! You won't be disappointed!

A promotional graphic for SOA's Student Outreach Day. The background features a city skyline with tall skyscrapers under a blue sky. The text is overlaid on a dark blue background with orange and white diagonal stripes. The main title is "SOA's Student Outreach Day" in white. Below it, the location "University Club" and date/time "March 3, 3:00-6:30pm" are in orange. At the bottom, it says "Featuring SOA President, Mike Lombardi" in white. Three logos are at the bottom: UWActSci (University of Waterloo), SOCIETY OF ACTUARIES, and MathSoc.

**SOA's Student Outreach Day**

University Club  
March 3, 3:00-6:30pm

Featuring SOA President, Mike Lombardi

UWActSci SOCIETY OF ACTUARIES MathSoc

# Other Upcoming Events

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## P Exam Tutorial



*Session 1: Wednesday March 7, 4:30 – 6:30 PM, Room TBD*  
*Presented by Professor Diana Skrzydlo*



*Session 2: Wednesday March 14, 6:00 – 8:00 PM, Room TBD*  
*Presented by Professor Surya Banerjee*

Are you an Actsci student looking to obtain your ASA designation? The Probability (P) Exam is often considered the most common starting point in an actuary's journey. Come out to these two prep sessions to obtain an overview of the material covered in the P exam. We are pleased to be able to have two of our very own professors from the Department of Actuarial Science and Statistics give the lectures!

## Desjardins Trivia Night

*Thursday March 22, Time and Location TBD*

Do you like Actsci? Do you enjoy trivia? Representatives from Desjardins will be coming to UW to host the Desjardins Trivia Night! Come out to learn something new about the industry! Stay tuned for updates on the time and location!



# Desjardins

# Enterprise Risk Management and Its Role in the Actuarial World

*By Shaunak Rajadhyaksha*

## What is Enterprise Risk Management?

Risk. It's a vague term, and one that is very prevalent in corporate life. If you're running a business, one of the most important things you have to consider is the risk of potential future dangers to your earnings and capital. This is true whether you are a small businessowner or an executive member of corporate in a multimillion dollar company. Why is this important? Well, let's take a trip down memory lane back to 2008 – what happened? Companies were engaging in excessive risk taking, all the while having a lack of transparency, accountability, and governance structures in place. Corporations were not managing their risk effectively, causing their stakeholders to suffer and ultimately initiating a financial meltdown. What can companies do to avoid this in the future? How can corporations go about effectively minimizing the effects of risk on their business objectives?

I'm glad you asked. There's a new idea floating around in the corporate world. It's less than a decade old, but more and more organizations are adopting it by the day. Enterprise Risk Management, or ERM, is defined as a process of planning, organizing, leading, and controlling the activities of an organization to mitigate the effects of risk that may interfere with the achievement of its objectives. It is essentially a strategy that is focused around planning – assessing and preparing for any future dangers, hazards, or potentials for disaster which may interfere with an organization's operations. Now, if you're an Actsci student, you're probably thinking that this sounds awfully similar to something you're already quite familiar with – insurance. Well, you're correct!



Perhaps the most widely-used tool used by companies looking to manage their risk is insurance – property insurance for physical damage due to unforeseen events and liability insurance to deal with lawsuits and claims of loss or injury. However, this is one small aspect in the broad spectrum of ERM and one small role that actuaries play in this process.

## Actuaries in Enterprise Risk Management

Traditional actuaries will work in insurance companies or consulting, dealing with mostly financial (quantitative) risk. However, ERM extends this idea to not only apply to insurance, but pretty much any other industry. ERM can be found to apply to risks in manufacturing, non-profit, agriculture, energy, the technological sector – you name it. Also, ERM is not limited to financial risks. Companies experience several other different kinds of risk – operational, legal, reputation, hazard, and strategic, just to name a few. These risks are qualitative in nature but definitely have an equal influence on the value of a company as financial risk.

Actuaries are highly skilled in using their mathematical acumen to model uncertainty and predict the risk of more traditional contingent events such as mortality, disability, illness, and property damage. By applying these techniques into an ERM environment, actuaries are able to use their skills to model the other non-traditional types of risk. They would also be able to provide insights that may have been previously overlooked in a company's risk management practices. Another important skill that many actuaries take pride in is the exploitation of risk. As such, they would also find ways to exploit opportunities of risk that they believe would actually benefit the organization. Of course, these are just a few key ways in which actuaries can apply their expertise towards the field of ERM. If you're an Actsci student, you would know that the possibilities are virtually endless!

## The Casualty Actuarial Society Framework for ERM

One of the most widely-accepted frameworks outlined for the practice of ERM is one defined by the CAS in 2003. It was defined as "...the discipline by which an organization in any industry assesses, controls, exploits, finances, and monitors risks from all sources for the purpose of increasing the organization's short- and long-term value to its

stakeholders." The CAS also outlined two "dimensions" of ERM, Risk Type and Risk Management Processes.

The types of risk include (but are not limited to):

- Hazard Risk – risks that pose a level of threat to life, health, property, or the environment
- Financial Risk – examples include pricing, currency, liquidity, and asset risks
- Operational Risk – risks that arise from a company's ordinary business activities
- Strategic Risk – risks that arise from sources of loss due to unsuccessful business planning



The risk management process involves the following steps:

1. Establishing Context – developing an understanding of the current state by which the organization conducts business in an internal, external, and risk context
2. Identifying Risks – developing documentation outlining material threats to the organization's achievement of objectives
3. Analyzing/Quantifying Risks – developing models to quantify the outcomes of each material risk (e.g. probability distributions)
4. Integrating Risks – aggregating the risk models and formulating results by describing the impact of the risks on performance
5. Assessing/Prioritizing Risks – determining the contribution of each risk to the risk profile and prioritizing them appropriately
6. Treating/Exploiting Risks – establishing strategies for controlling and taking advantage of the various risks
7. Monitoring and Reviewing – consistently monitoring the risk environment and the effects of the above strategies

### The CERA Designation

If you're an actuarial student interested in the growing field of ERM, the Chartered Enterprise Risk Analyst designation is the way to go! This actuarial credential is the most extensive and rigorous designation for Enterprise Risk Management. Not to mention it is a globally-recognized qualification! The CERA designation gives actuaries the opportunity to develop strong ERM expertise in order to contribute towards good business decisions. Under the Society of Actuaries, the requirements to obtain the CERA credential are very similar to those of the ASA designation. Effective July 2018, you must complete the VEE requirements for three subjects (Economics, Accounting and Finance, Mathematical Statistics). You must also pass the 5 of the 7 preliminary ASA exams (P, FM, IFM, STAM, and SRM), as well as complete the FAP modules and APC course. In addition, you must complete the Enterprise Risk Management Module and exam. Actuarial professionals and industry leaders recognize the importance of ERM in the business world. For this reason, the CERA is a highly respected qualification and is growing more and more popular among actuarial students. If you're interested in pursuing the field of ERM, look into the CERA designation! It will open doors to wider risk management roles in a business that are outside of the scope of traditional actuarial positions. This will make you stand out from the crowd, so definitely consider it!

# CERA



# CONTACT US

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Got any burning questions about actsci, academics, or the meaning of life? Want to stay updated on the latest and upcoming events? Reach out to us on social media or come visit us during office hours in M3 1003 (first floor to the right of the main entrance when you walk in – where all the club offices are). We'll be happy to address any of your concerns or inquiries! 😊

Also, be sure to check out our revamped website: [uwactsciclub.com](http://uwactsciclub.com)

UW ActSci Club Winter 2018 Office Hours (M3 1003)						
Start Time	End Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:25	9:25					
9:25	10:25	Ryan Lu	Mikayla Daniels			
10:25	11:25		Liddie-Beth Palmers		Mikayla Daniels	Tiger Xing
11:25	12:25		Kristi Liu		Maya Perelman	Tiger Xing
12:25	1:25			Maya Perelman	Adajiah Wilson	Tim Huang
1:25	2:25	Amanda Bruder	Ryan Lu	Rihao Kang		Jimmy Qi
2:25	3:25	Tim Huang	Shaunak Rajadhyaksha	Hailey Do		
3:25	4:25	Tina Huang				



UW Actsci Club



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@uwactsciclub



University of Waterloo Actuarial Science Club