

# Actuarial Science

Master of Science

Certification of Professional Achievement

Full-Time or Part-Time Option

Join a distinguished community of actuarial leaders.

## Features

**Participation from nearly 200 industry leaders**, potential employers, and alumni including CEOs, CFOs, Chief Risk Officers, and leaders from Society of Actuaries (SOA) and Casualty Actuarial Society (CAS), who interact directly with students through courses, special events, and other networking opportunities.

**A leading-edge curriculum** that includes predictive modeling, data science, machine learning, risk management, and financial markets and investments, in addition to a solid actuarial foundation.

**A course of study that covers main actuarial paths and prepares students** for the associate actuarial examinations of SOA and CAS.

**Core courses taught by actuaries and analytical professionals** who have Ph.D.s and 15+ years of industry experience. Most also have SOA and CAS designations.

**Oversight from the Actuarial Science Academic Committee**, led by Columbia's Statistics Department chair and steered by professors from the Statistics and Engineering Departments.

**Professional and career development resources** and courses to build leadership, presentation, and communication skills.

**A setting in the heart of the financial/actuarial capital** of the world (New York City) that provides access to the world's foremost practitioners and industry leaders.

**A supportive, familial, and fun environment** in which students, faculty, and alumni build lifelong connections.

## Flexible Options

Program Options	Required Experience	Course Formats	Time Commitment
<b>Master of Science (full-time)</b>	Knowledge of elementary economics, linear algebra, and multivariate calculus	On-campus	3 semesters
<b>Master of Science (part-time)</b>	Knowledge of elementary economics, linear algebra, and multivariate calculus	On-campus	Up to 3 years
<b>Certification of Professional Achievement</b>	Strong academic record in mathematics, statistics, economics or quantitative studies	Online	3 years (6 consecutive terms)



*"After coming to my first job fair here, I heard back from multiple companies looking to interview me. The program offers in-person networking opportunities you wouldn't get online."*

**Susan Shen | '18SPS, Actuarial Science**  
Actuarial Associate, Buck

Apply Online [sps.columbia.edu/actuarial-science](https://sps.columbia.edu/actuarial-science)

# Actuarial Science

Master of Science

Certification of Professional Achievement

Full-Time or Part-Time Option

## Professional Development

The Actuarial Science curriculum is tailored to prepare students to excel in their careers. With 160+ organizations in the program's global network, graduates boast a remarkable track record of entering and advancing in their actuarial careers.

### Proseminar

Full-time students are required to enroll in our signature Proseminar Lecture and Networking Series each semester\*. Twice weekly, the Proseminar brings actuarial industry leaders and C-suite executives across industries to Columbia's campus to meet with students and discuss practical career development strategies such as effective professional networking, career advancement pathways, and job searches.

#### Past Proseminar Presenters Have Represented

- Casualty Actuarial Society
- AIG
- Society of Actuaries

#### Past Proseminar Topics Have Included

- Risk Management
- InsurTech, Insurance Trends
- Leadership

\*Students may substitute a Proseminar if they have secured and successfully completed an internship. Visit the Actuarial Science website for full details.

### Integrated Project

Available as an elective, the Integrated Project tasks students with acting as a consultant, working intensively with industry experts on a real-world project. Students are matched with two mentors who are practitioners in the actuarial science field. Past mentors have included former presidents of the Society of Actuaries, CEOs, and chief actuaries of large insurance/reinsurance companies.

### Annual Career Fair

At the annual Columbia Actuarial Science Program Career Fair, students get the exclusive opportunity to meet, network, and interview with senior actuaries from major insurance organizations and consulting firms.

#### Additional Career Events include:

- The Actuarial Society of Greater New York's Actuarial Career Fair
- Columbia Actuarial Science Career Day
- Leadership development and interview workshops
- Networking events with actuaries and alumni

## At a Glance

In the Actuarial Program you will:

**Gain access to a powerful global network** of 160+ organizations, such as AIG, Prudential, Deloitte, EY, MetLife, and many others, that provide employment opportunities to students and alumni.

**Be welcomed into a large Columbia alumni actuarial community** that mentors and hires current students.

**Learn from top academics and practitioners** in actuarial science, finance, and risk management, including leading Wall Street advisors and fellows of Society of Actuaries (SOA) and Casualty Actuarial Society (CAS).

**Receive innovative interdisciplinary training** drawing on faculty and coursework from the University's Departments of Statistics, Industrial Engineering and Operations Research, Mathematics, Economics, and the Columbia Business School.

**Become a mentee** of an industry leader/practitioner who will oversee a project/presentation and provide guidance and support.

**Master the theoretical knowledge, practical skills and domain knowledge** relevant to a range of industries, including insurance, finance, and risk management.

## Who Should Apply

**Recent College Graduates** with a strong background in a quantitative field, such as mathematics (including teachers and tutors), statistics, actuarial science, physics, economics, computer science, accounting or finance.

**Career-Changers** with strong quantitative skills who are looking to transition into the actuarial field.

**Prospective Actuaries** interested in starting a career, career advancement, and exam preparation.



*"Thanks to my education at Columbia, I've been trained to be a leader."*

**Grace Feng Wu | '13SPS, Actuarial Science**  
Senior Consultant and Actuary, Aon