

# WHAT CAN I DO WITH A DEGREE IN APPLIED AND INDUSTRIAL MATH?

**UOIT's Bachelor of Science (Honours) degree with a major in Applied and Industrial Mathematics** covers a wide range of courses with emphasis on the applications of mathematics. Integral to every aspect of scientific endeavour, mathematics is fundamental to problem solving – whether modelling atmospheric phenomena or managing the complexities of risk in financial markets. Students in the Applied and Industrial Mathematics program work with state-of-the-art algorithms and software to learn concepts, principles, qualitative and quantitative methods and innovative problem-solving skills. Students interested in managerial and leadership roles in commercial and industrial scientific enterprises can choose to complement the technical studies of their program with business and management courses by applying to the five-year Bachelor of Science and Management (Honours) program in their third year of study. For more information about the Applied and Industrial Mathematics program, please visit the Faculty of Science website at [science.uoit.ca/undergraduate/programs-and-information-for-prospective-students/applied-and-industrial-mathematics/](http://science.uoit.ca/undergraduate/programs-and-information-for-prospective-students/applied-and-industrial-mathematics/)

## WHAT SKILLS WILL I DEVELOP IN THE APPLIED AND INDUSTRIAL MATHEMATICS PROGRAM?

A degree in Applied and Industrial Mathematics will allow you to develop a number of skills with application in a variety of work contexts.

Some of the skills you will acquire and/or develop in the Applied and Industrial Mathematics program include:

Oral and Written Communication	Problem-Solving	Teamwork
Research Skills	Planning and Organization	Advanced Numerical Skills
Analytical and Critical Thinking	Statistical/Data Management Skills	

## EMPLOYERS HIRE PEOPLE NOT DEGREES!

Think beyond your program when choosing a career. To find the right career, you will need to take into account your interests, skills, work preferences and values. The list below is meant to give you some ideas, but it is not exhaustive. Don't limit yourself!

## WHAT ARE MY CAREER OPTIONS WITH A DEGREE IN APPLIED AND INDUSTRIAL MATHEMATICS?

Applied and Industrial Mathematics is an interdisciplinary field that opens up possibilities for careers such as:\*

Account Manager	Civil Engineer	Investment Banker	Personal Financial Planner
Actuary	Consultant	Lawyer	Physicist
Appraiser	Economist	Logistics Specialist	Professor
Astronomer	Environmental Consultant	Market Research Analyst	Risk Analyst
Auditor	Epidemiologist	Mathematician	Statistician
Bioinformatics Specialist	High School Teacher	Meteorologist	
Certified General Accountant	Insurance Claims Adjuster	Military Officer	
Chartered Accountant	Insurance Underwriter	Operations Research Analyst	

\*Please note that many of the occupations listed above may require further education, certifications or work experience in conjunction with your degree.

## WHERE HAVE PREVIOUS UOIT SCIENCES GRADS WORKED?

NexJ Systems	Ontario Parks	Rexall	Silliker Canada
Ontario Legislature Internship Programme	Patheon, Inc.	Sir Sanford Fleming College	Techcentive Services Inc.
	Purdue Pharma		Yeoju Girls Middle School

# HOW CAN I GET SOME PRACTICAL EXPERIENCE?

A degree on its own is generally not enough to land you your dream job. Practical experience is critical, not only to give you the qualifications you need to be competitive, but also to help you better understand your own interests, skills, personality and work values so that you can be confident that your next career step is the right fit for you.

There are a number of ways for you to get some real-world experience and information about potential careers related to Applied and Industrial Mathematics. These include:

**Experiential Learning** – The Faculty of Science offers an optional five-year co-operative education program to eligible students in Applied and Industrial Mathematics. The co-op option gives you opportunities to apply concepts learned in the classroom and lab to real-world situations and help you gain valuable, relevant work experience to promote networking and lifelong career success. A limited number of research internships are also available. For more information, visit [science.uoit.ca/about/experiential-learning1.php](http://science.uoit.ca/about/experiential-learning1.php)

**Volunteering** - If you have little or no work experience, unpaid work experiences are a great way to get your foot in the door, allowing you to develop your skills through hands-on experience, learn more about your interests and make valuable contacts to add to your network for potential paid work opportunities down the road. For more information, find the volunteering resource at [uoit.ca/careertools](http://uoit.ca/careertools)

**Informational Interviews** - Informational interviews allow you to get the inside scoop on potential career paths from individuals working in the field. For information on how to set up and conduct informational interviews, find the Informational Interview resource at [uoit.ca/careertools](http://uoit.ca/careertools)

**Get Involved** - The Faculty of Science has several clubs and organizations dedicated to, among other things, organizing experiential learning and professional opportunities for their members. For more information, visit [science.uoit.ca/undergraduate/student-clubs/](http://science.uoit.ca/undergraduate/student-clubs/). See also [your-sa.ca](http://your-sa.ca) for information about other clubs offered by the Student Association. Check out [uoit.ca/getinvolved](http://uoit.ca/getinvolved) for information about the **Student Involvement Record**.

## WHERE CAN I FIND MORE INFORMATION?

**Student Portal** – There are a number of career resources on the Student Portal to get you started in your career research process, including links to job leads and information about further education. For more information, visit: [uoit.ca/careercentre](http://uoit.ca/careercentre)

**Career Counselling** – Email [careercentre@uoit.ca](mailto:careercentre@uoit.ca) to book a career counselling appointment if you would like to discuss your career development, including issues such as: career indecision; identifying your skills, interests, work values and personality style as it relates to the workplace; feeling overwhelmed, anxious or confused about the career planning or decision-making process; and overcoming barriers to career development.

**Academic Advising** – Email [science.advising@uoit.ca](mailto:science.advising@uoit.ca) to set up an appointment to discuss questions related to your academic path within the Faculty of Science.