

Careers by Major - Mathematics/Statistics



This document serves as a starting point for your career research. Each Careers by Major page provides lots of ideas on various career areas, as well as how to gain related skills and experience. Useful resources and job samples are also provided. Visit us in the Career Centre to find out more about career areas that interest you.

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Sample Occupations and Jobs

Below is a sample of the many types of occupations and jobs pursued by graduates of this program.

Sample Occupations

Note: This is not an exhaustive list. Detailed career profiles are available in the Career Centre. Some occupations require further education and experience.

Account Manager*	Investment Advisor*
Accountant*	Investment Banker*
Actuary*	Land Surveyor*
Appraiser*	Loan Officer*
Architect*	Logistics Specialist*
Astronaut*	Management Consultant*
Astronomer*	Market Research Analyst*
Auditor*	Mathematician*
Avionics Tech*	Mathematical Technician
Bank Manager*	Meteorologist*
Bank Customer Service Rep.*	Middle School Teacher*
Benefits Administrator	Money Manager*
Bill and Account Collector*	Numerical Analyst
Budget Analyst	Operations Research Analyst*
Building Inspector*	Personal Financial Planner*
Building Superintendent*	Physicist*
Claims Adjuster	Pilot*
Computer Programmer*	Principal*
Construction Tradesperson*	Professor*
Criminologist*	Purchaser*
Database Developer*	Real Estate Appraiser*
Economist*	Research Analyst*
Elementary School Teacher*	Scientist*
Energy Auditor*	Special Education Teacher*
Engineer*	Statistician*
Epidemiologist*	Systems Operation Analyst
High School Teacher*	Tax Preparer*
Home Inspector*	Trader*
Insurance Claims Adjuster*	Venture Capitalist*
Insurance Underwriter*	

Sample Job Listings

Below is a sample of positions that have been promoted within the Career Centre. To access current postings, login to CLN at www.cln.utoronto.ca and click on Jobs.

- Software Developer, Department of Mathematical and Computational Sciences, UTM
- Scheduling and Examination Clerk, Office of the Registrar, UTM
- Research Coordinator, Robert Gillespie Academic Skills Centre, UTM
- Senior Statistical Review Officer, Government of Ontario
- Marketing Database Analyst, MONEXgroup
- Data Mining Analyst, Waterfront International
- Technical Architecture Consultant, Accenture
- Junior Bioinformatician, Ontario Institute for Cancer Research
- Health Economist Statistician, Canadian Medical Protective Association
- Quantitative Analyst, Google
- Business Analytics and Optimization, IBM Canada Ltd.
- Database Administrator, E-Tech Computing
- Financial Consultant, World Financial Group
- Junior Geotechnical Engineer, GeoPro Consulting Limited

Sample Areas of Employment

- Computer, hardware, software, and telecommunications companies
- Government
- Aerospace companies
- Banks, investment firms, insurance companies, and retail chains
- Research and development firms
- Consulting firms
- Biotechnology firms
- Engineering and manufacturing firms
- Health, medical, and pharmaceutical industries
- Educational institutions

* View these titles at Career Cruising, available on CLN (cln.utoronto.ca) under the Resources tab.

Program-Related Skills

Academic courses in this program provide opportunities to develop the following types of skills. Make a career counselling or an employment strategy appointment to discuss how you can demonstrate these skills to employers.

- **Critical thinking & interpersonal:** construct sound arguments and expose illogical ones; collaborate with others; and effectively communicate ideas and abstract concepts.
- **Problem solving:** approach problems from different angles to identify key issues; and apply mathematical/statistical theories and methods to solve problems.
- **Technical:** understand mathematical/statistical concepts and the rules of logic; and use a range of specialized software.
- **Investigative & organizational:** analyze large quantities of numerical data; find patterns and draw conclusions; and present mathematical arguments with accuracy.

Explore Careers & Build Networks

Career Exploration 101

Take our 15 minute online module available at utm.utoronto.ca/careers/career-planning/career-exploration and attend the Career Exploration Part 2 in-person workshop read about how you can gain access to UTM's career exploration programs:

- Extern Job Shadowing
- In The Field

Informational Interviews

Informational interviews are a great way to connect with professionals in a career area of interest and gain valuable insights about a career, company, or industry that would otherwise be difficult to find in books or online. Check out our tip sheet to learn more.

Alumni Profiles

Check out our Alumni Profiles page with submissions from UTM grads to find out how their experiences have affected their career direction.

Events

Attending career panels, networking events, employer info sessions, and career fairs is a great way to meet professionals and learn more about careers, companies, and industries. Login to CLN and click on Events & Workshops to see what's coming up.

Talk to Professors

Connecting with your professors can be a great way to explore the different paths a major can lead you to, as well as learn about possible opportunities for research, volunteering, or becoming a TA. Drop by during their office hours or request an appointment.

Student Organizations

Join a student club or an academic society at UTM to meet like-minded people, explore your interests, and gain valuable skills. To view a list of current clubs and societies, visit the Centre for Student Engagement online. Some organizations you may consider are:

- Mathematical and Computational Sciences Society
- Undergraduate Economics Council
- Undergraduate Finance Association

LinkedIn

Create a LinkedIn profile to connect with professionals in various fields, explore the career paths of UTM alumni, research employers, apply for specific positions, and more. Need help? Come to the Career Centre to book a LinkedIn profile critique.

Professional Associations

There are many benefits of becoming a member of association(s), such as developing a network of contacts, learning about industry trends, accessing industry-related job postings, and stating your affiliation on your resume. Some associations related to this major are:

- Canadian Mathematical Society (CMS)
- Statistical Society of Canada (SSC)
- Canadian Applied and Industrial Mathematics Society (CAIMS)

Get Experience

Get some experience and exposure to the industry while being a student. This will increase your chances of finding a job after graduation, while helping you decide what area might be most suitable for you.

Crack the Hidden Job Market

Networking is an essential element of job search today, as most jobs are not advertised. While you should still apply for positions you find online, building relationships with professionals is a proven way to access the "hidden job market" with some of the most desirable opportunities.

Attend the "Learn to Network" workshop to discover proven techniques to effectively introduce yourself and make contacts.

On-Campus

On-Campus Opportunities Booklet

Check out the On-Campus Opportunities booklet on www.utm.utoronto.ca/careers/on-campus-opportunities to view a list of some of the ways you can get valuable experience on campus.

Work Study Positions

The work study program provides eligible students with an opportunity to work on campus during the academic year and gain experience. Many departments use this program to hire UTM students during the Fall/Winter and Summer terms.

Research Opportunity Program (ROP)

UTM's Research Opportunity Program (ROP) allows undergraduate students to gain valuable research experience and earn a course credit by participating in a faculty member's research project. Courses are held during Summer and Fall/Winter terms.

Part Time and Volunteer Positions

- Attend the annual Get Experience Fair
- Check out our binder with detailed information on volunteer opportunities; available in the Career Centre
- Learn about the Co-Curricular Record (CCR), which can help you find opportunities beyond the classroom and have your skills and experiences captured on an official document; go to www.ccr.utoronto.ca to find out how you can get involved

Student Organizations

Join a student club or an academic society at UTM to meet like-minded people, explore your interests, and gain valuable skills. To view a list of current clubs and societies, visit the Centre for Student Engagement at www.utm.utoronto.ca/student-life/student-organizations.

Off-Campus

Internships, Summer, Part Time and Volunteer Positions

- Check out our binders with detailed information on internships and volunteer opportunities; available in the Career Centre
- Login to Career Learning Network (CLN) and click on Jobs to access current postings advertised to UofT students
- Attend the annual Get Hired: Summer and Full-Time Jobs Fair
- Consider taking an academic internship course through your department
- Check out Government of Ontario - Job Programs for Youth Summer Employment Programs' web page
- Review our Internships, Summer Employment Programs, and Summer Job Search tip sheets at utm.utoronto.ca/careers/tip-sheets

Full Time Positions

- Login to CLN and click on Jobs to access current postings advertised to graduating students and recent UofT grads. Note: You must attend the "Now That I'm Graduating, What's Next?" workshop to gain access to these postings.
- Attend the annual Get Hired: Summer and Full-Time Jobs Fair
- Check out our list of industry-specific job boards on www.utm.utoronto.ca/careers/jobs/jobs-resources-links

Useful Resources & Next Steps

Appointments

- Attend a one-on-one appointment with a career counsellor or an employment strategist to discuss what career options might work for you and determine a job search plan. Contact the Career Centre for more information.
- Meet with an academic or departmental advisor, who can guide you in achieving academic success. Contact the Office of the Registrar or your department for more information.

Additional Web Resources

- Prospects – Career Options in Mathematics
- Career Development Organization – Careers in Maths booklet
- CareerProfiles – Statistician Career Profile
- Fields Institute for Research in Mathematical Sciences
- Canada's Top 100 Employers for Young People

Career Resource Library

The Career Resource Library contains information about a wide range of occupations in all industries, resume and cover letter resources, effective work search methods, graduate/professional school preparation guides, and more. Located in DV 3094.

Career Planning by Year

Look for our Career Planning by Year web page on www.utoronto.ca/careers/career-planning for ideas of important career related activities for each year.

Questions?

Visit the UTM Career Centre located in DV 3094, call 905-828-5451, or visit www.utm.utoronto.ca/careers.

Notes
