What can I do with a Major in Mathematics?

Skills Developed

- Aptitude for Accuracy of Details
- Communicate Ideas Clearly
- Computer Knowledge
- Creativity
- Curiosity
- Enjoy Applying Mathematical Techniques
- Enjoy Synthesizing Data
- Extensive Knowledge of the Scientific Method
- Formulate Scientific Problems
- Formulating & Modeling
- Learn New Information & Apply it to Professional Demands
- Logical Thinker
- Numerical Computation
- Organize & Interpret Scientific Data
- Problem Solving
- Technical
- Understand & Express Complex Technical Information
- Work Independently
- Written & Oral Communication

Work Environments

A mathematics education provides a solid training that is sought after by employers and allows flexibility in your career choices. Graduates of this program may work in industries/organizations such as aeronautics, aerospace, agriculture, banking, Canadian armed forces, research/academic institutions, public and private schools, fisheries, financial and insurance companies, federal & provincial government organizations, real estate and leasing companies, pharmaceutical companies or research laboratories.

The Mathematics Program at the University of Lethbridge

Mathematics is the study of structure and pattern. Applied mathematicians develop models of structures in the real world, and in this way mathematics provides a language for many other physical and social sciences. In pure mathematics, the structures are more abstract, and the emphasis is on proof of ideas. Mathematics students will study both pure and applied mathematics, offering the opportunity to see real-world applications of theoretical studies. In all areas of mathematics, research is very active, with a rapid expansion over the last few decades.

The mathematics degree program offers courses in algebra, analysis, geometry, and statistics. Often students will combine mathematics with courses in physics, computer science, chemistry, economics, management, or other areas of interest. The department of Mathematics and Computer Science offers a major in Mathematics for the Bachelor of Science (BSc) or Bachelor of Arts and Science (BASc) degree program.

For more information on the Mathematics Major at the U of L:
http://www.uleth.ca/artsci/math-computer-science

Faculty of Arts & Science
C526 University Hall
Phone: 403-329-2470
Email: See Contact Website
Academic Advising:
http://www.uleth.ca/ross/academic-advising
Graduates may also pursue work in the fields of manufacturing, medicine, psychology, health care, social assistance, public administration, communications or biology and life sciences.

Key Areas of Specialization:
Research, Development, Design, Data Collection and Processing, Testing, Operations, Quality Control, Statistical Processing Control, Environmental Analysis, Consulting, Administration, Information Analysis, Education

Entry Level Job Titles

These jobs are normally intended for new graduates and require 0 to 2 years of experience. It is important to note that many entry level positions require some related experience or demonstrated ability to perform job-related tasks. Even those positions that do not require experience will still prefer an experienced candidate, if one is available.

- Costing Analyst
- Entry Level Actuary Analyst
- Investment Services Administrator
- Junior Economist
- Research Analyst
- Research Assistant
- Retirement Actuary
- Students Trainee (Mathematics/Statistics) Internship
- Technical Architect

Note: The U of L offers various resources and programs to facilitate students in gaining work and volunteer experience. Find an entry level position on the CES job board or join the Management or Arts & Science Cooperative Education Programs. Summer jobs, part-time work, internship positions and volunteer experience help students to enhance their skillset and accumulate work experience for their future career.

Related Job Titles

These jobs generally require extensive, relevant work experience and/or further education.

- Actuarial Consultant
- Actuarial Economic Capital Contractor
- Applied Mathematician
- Assistant Professor (Mathematics, Actuarial Sciences, Applied Mathematics)
- Associate Actuary
- Astronomer
- Biomathematician
- Biostatisticians
- Computer Scientist
- Consulting Actuary
- Economist
- Field Actuary
- Financial Mathematician
- Health & Benefits Actuarial Consultant
- Insurance Actuary
- Investigations and Resolutions Statistician
- Investment Banker
- Life Actuary
- Longevity Risk Modeling Statistician
- Mathematical Consultant
- Mathematician
- Meteorologist
- Operations Research Analyst
- Pension Actuary
- Personal Lines Actuary
- Pricing & Product Development Actuary
- Research Assistant
- Research Scientist
- Reserve Actuary
- Risk Manager
- Sales Manager
- Senior Actuarial Analyst
- Software Developer
- Statistical Associate
- Statistician
- Systems Analyst
- Teacher
- Theoretical Mathematician

Thinking Outside the Box: Other Possible Job Titles

On average, people change their careers three to five times in their lifetime. So, no matter what major you choose, you may still be interested in opportunities totally unrelated to your program of study. We encourage you to be open to all possibilities! Your undergraduate degree can be a springboard for other educational pursuits, and your transferable skills and experience can prepare you to work in a multitude of settings.
• Account Executive Insurance
• Accountant
• Aerospace Engineer
• Agricultural Commodity Inspector
• Agriculture Engineer
• Agrologist
• Air Traffic Controller
• Aircraft Structural Technician
• Alternative Energy Technologist
• Architect
• Asset Management Specialist
• Audiologist
• Audiometric Technician
• Audit Services
• Automated System Technologist
• Avionics Technician
• Biochemist
• Biologist
• Biomedical Engineer
• Biomedical Engineering Technologist
• Biotechnology
• Border Service Officer
• Business Insight & Analytics Manager
• Computer Scientist
• Cryptologist
• Data Miner
• Demographer
• Director Canadian Retirement & Saving Programs
• Director of Finance
• Ecologist
• Engineer
• Environmental Economist
• Epidemiologist
• Exploration Geophysicist
• Financial Analyst
• Geologist
• Human Resources & Compensation Consulting
• Investment Banker
• Investment Manager
• IT Service Management Process Specialist
• Market Research Analyst
• Pension Analyst
• Physicist
• Pricing Officer/Manager
• Programming Analyst
• Quantitative Associate Director
• Securities Data Analyst
• Senior Payroll & Benefits Coordinator
• Software Developer
• System Analyst
• Tax Manager
• Technical & Vocational Instructor

Useful Resources

Recommended websites to assist in exploring the field Mathematics and its career opportunities.

Canadian Mathematical Society
http://cms.math.ca/

Statistical Society of Canada
http://www.ssc.ca

Canadian Applied and Industrial Mathematics Society
http://www.caims.ca/

The Canadian Society of History and Philosophy of Mathematics
http://www.cshpm.org/

Canadian Institute of Actuaries
http://www.cia-ica.ca/

Alberta Learning Information Service Occupational Profiles
Mathematician, Statistician & Actuary

Association for Women in Mathematics
http://sites.google.com/site/awmmath/home

Canadian Operation Research Society
http://www.cors.ca/

Mathematics of Information Technology and Complex System
www.mitacs.math.ca

Mathematics Council of the Alberta Teachers’ Association
http://www.mathteachers.ab.ca/

Mathematical Association of America
http://www.maa.org/careers/

Society of Actuaries
http://www.soa.org/
# Campus Resources

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<th>Campus Job Resources</th>
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| Career & Employment Services Job Board  
**CES Job board**  
http://www.uleth.ca/ross/ces/job-board |
| Management Co-op Education  
**http://www.uleth.ca/management/co-op** |
| Arts & Science Applied Studies  
**http://www.uleth.ca/artsci/applied-studies/students** |
| Study Abroad & Exchanges  
**http://www.uleth.ca/international/content/study-abroad-exchanges** |
| Arts & Science Co-op Education & Internship  
**http://www.uleth.ca/artsci/coop** |
| Management Study Abroad & Exchanges  
**http://www.uleth.ca/management/study-abroad** |

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**Career & Employment Services (CES)**

CES assists U of L students and graduates with their career exploration and work search needs.

AH154 Anderson Hall, Phone: 403-329-2000  
Mon- Fri: 9:00 a.m. to 12:00 p.m.  
1:00 p.m. to 4:00 p.m.