What Can I Do with a Degree in Math?

*Courtesy of SFU Career Services*

*For informational purposes only*

Examples of Math major careers, including careers that may require further education beyond a bachelor's degree:

1.) Market Researcher
   - Collect analyze and interpret information on consumer preferences and public attitudes towards issues. Businesses and organizations use the information to determine to whom and how to market their product or service, where to open a new location or the overall feeling of the public toward a certain political issue.

2.) Cryptographer
   - Keep data and other messages secret. Cryptography is the art of writing or solving ciphers. The process of encrypting and decrypting messages is governed by mathematical algorithms. The most important requirements for cryptographers are a mind for math and the ability to sit a computer crunching numbers and formulas.

3.) Mathematician
   - Create new mathematical theories to solve economic, scientific, business and engineering problems. May analyze the most efficient way to schedule airline routes, or the effects of new drugs on disease. Cryptanalysts analyze and decipher encryption systems designed to transmit military, political, financial or law enforcement information.

4.) Market Research Analyst
   - Study and predict the sales of products and services. The job involves three basic steps: gathering information, analyzing it and writing a report stating conclusions. Works for private and public organizations.

5.) Insurance Claims Adjuster
   - Review applications for insurance coverage and decide how much to charge or conclude that the risk of insuring an individual or business is too great. Options to specialize in a number of fields including home, health, commercial and life insurance.

6.) Sports Statistician
   - Attend sporting events and record data in real time. Duties include keeping score, preparing final stats for league records and
preparing mid and final game summary reports for the media. 
Works for sports associations.

7.) Auditors  
- Specially trained accountants who ensure organizations financial records and operations are managed properly. They prepare financial statements legally required by external bodies as well as internal audits to prevent fraud.

8.) Insurance Claims Adjuster  
- Investigate insurance claims to determine the amount of money owed to the claimant. Adjusters investigate the circumstances surrounding claims and determine the loss amount by estimating the cost of repair or replacement. Requires a B.Sc and Chartered Insurance Professional designation.

9.) Investment Advisor  
- Use financial knowledge to advise clients on investments that match their financial profile. Research financial markets in order to buy and sell investments like bonds, mutual funds and term deposits for their clients. Requires a B.Sc and registration with the securities commission.

10.) Epidemiologist  
- Health researchers that look at epidemics and try to identify the causes as well as how diseases can be prevented. Gather statistical data about different groups people and compare the sets to uncover risk factors. Requires a B.Sc and a masters in epidemiology, public health or health statistics.

11.) Architect  
- Strong mathematical skills are required to ensure that buildings are structurally sound and that angles will fit within the overall structure. They must produce building drawings that include mechanical, electrical and structural specifications. Requires successful completion of the architect registration exam.

12.) Economist  
- Study how society distributes scarce resources like land, labour and the machinery used to create goods and services. Collect and analyze data on the economy and apply theory and advanced mathematics to interpret the results and forecast future changes.