



STEM Careers

Mathematician

Job Description: Theoretical mathematicians come up with new mathematical rules and processes using the latest technology. Applied mathematicians use math rules and processes to solve scientific, engineering and business problems.

What does a Mathematician do?

- Help our military and intelligence agencies by designing and deciphering codes to securely transmit and retrieve sensitive information.
- Use mathematical models to predict the growth rate of tumors and how well chemotherapy can shrink them.
- Use math to model interactions between different animals to understand how the extinction of one species could impact the food chain.
- Develop models using math to predict tsunamis that develop after underwater sediment avalanches.
- Develop methods for solving problems that occur in areas of science and engineering or that come from applications in business or industry.

Your Interests:

- Do you enjoy working with math and technology?
- Are you good at math?
- Are you good at reasoning and logic?
- Do you like to solve problems?

Outlook: **Bright**

Average Salary - \$51.97 hourly, \$108,100 annually
Projected Job Openings - 200 over the next 10 years

Education/Program of Study:

- Bachelor's Degree in Mathematics for federal government jobs.
- Ph.D. in Mathematics for most private industry jobs.

Sources:

<https://www.onetonline.org/link/summary/15-2021.00>

http://quest.arc.nasa.gov/people/cfs/generic/mathematician_116.pdf

http://www.sciencebuddies.org/science-fair-projects/science-engineering-careers/Math_mathematician_c001.shtml?From=testb