

CAREER IN MATHEMATICS

Mathematics is a versatile and essential discipline that has a wide range of real-world applications. If you like working with numbers, there are many avenues that can lead to jobs that involve mathematics. Whether you have a strong aptitude for problem-solving, an interest in using math to drive innovation or a passion for developing new mathematical theories, there's a job out there that can suit your skills and interests. Here are some math-related careers, along with the national average salary and primary duties for each. For the most up-to-date salary information from Indeed,

1. Meteorologist

Primary duties: A meteorologist studies weather and makes weather predictions based on certain conditions. They analyze data from weather stations, observe weather patterns and study weather systems. They may also create detailed reports that they deliver to news stations and the general public. To become a meteorologist, you may pursue a bachelor's degree in atmospheric science, meteorology or a related field, and develop a strong foundation in mathematics, physics, and computer science.

2. Mathematics teacher

A mathematics teacher instructs students in math. They develop the course curriculum or follow a state-approved curriculum, administer tests, meet one-on-one with students who need more help to understand a concept and discuss a student's progress with their parent or guardian. Mathematics teachers may choose a specific type of math, such as statistics, calculus or algebra.

3 Research analyst

A research analyst is responsible for using data sets to understand more about how the business is operating. They monitor ongoing issues, analyze the information they gain in their research and help executive leaders make strategic business decisions. Research analysts use the data they secure to find trends and make predictions for future success.

4. Financial analyst

A **financial analyst** monitors investment opportunities and financial data so they can make suggestions and offer guidance to company stakeholders as they make investment decisions. Financial analysts also monitor the performance of investments such as stocks, bonds and commodities and interpret historical financial data and trends when making their recommendations. This helps ensure the accuracy of the information and creates better decisions across an organization. To become a financial analyst, you can pursue a bachelor's degree in finance, mathematics, economics or a related field, and develop strong analytical and problem-solving skills

5. Financial planner

A **financial planner** helps clients, which may include individuals, families or businesses, achieve financial success. They analyze a client's financial history, assess their needs and develop a plan that helps clients meet their financial goals. Financial planners may assist with asset protection, investments and budgeting and help their clients prepare for a large purchase.

6. Information security analyst

An **information security** analyst researches and installs software that can keep a company protected from cyber attacks or other security breaches. They write and implement information and communications (ICT) or information technology (IT) policies that employees follow to make sure the company can protect all sensitive information it holds. Information security analysts also create disaster relief protocols, conduct company-wide training on security and use data to measure a company's vulnerability. They may also attempt mock attacks to find weaknesses within a system and test its ability to stop the attack.

7. Civil engineer

A **civil engineer** designs transportation systems, which can include roads, bridges and dams. They may supervise the construction of these systems and monitor the needs for the maintenance of certain infrastructures. Civil engineers also analyze surveys, maintain a budget, acquire permits and use computer software to design their systems.

8. Auditor

An auditor is responsible for reviewing financial records and reports to ensure their accuracy. They check for any misappropriation of funds and may develop their own reports for members of the executive team and other stakeholders of the organization. Auditors frequently offer suggestions to leadership for what the business can do to be more efficient or reduce monetary waste.

9. Statistician

A statistician is responsible for using statistical methods to interpret data and provide solutions to real-world issues that a business may be experiencing. They may create surveys, make predictions based on data and help businesses design computer software that's able to gather the data they need. They may also ensure data integrity and accuracy to ensure others can use it effectively.

10. Mathematician

A mathematician uses mathematical methods and analysis to solve business problems. They analyze data, develop computer programs to gather numerical data and make predictions. Mathematicians may also monitor trends and create reports that they share with company officials so stakeholders can make important business decisions. To become a mathematician, you can pursue a Ph.D. in mathematics, and refine your mathematical and analytical skills.

11. Economist

Primary duties: An economist is responsible for studying the theory of supply and demand to identify opportunities for investment. They seek to understand production, distribution and purchasing from different parties involved in an exchange of goods and services. Economists keep up-to-date on economic issues and trends, analyze data and provide reports to the senior leadership of an organization. To become a statistician, you can obtain a bachelor's or master's degree in statistics, mathematics or a related field.

12. Algorithm engineer

An algorithm engineer designs and maintains algorithm systems. They use data from their algorithms to produce reports, create processes and solicit certain actions based on the data. Algorithm engineers also conduct several tests to make sure their algorithms meet the needs of the business and produce the types of responses that they'd expect.

13. Software engineer

A [software engineer](#) creates and implements software, programs, systems and applications. They meet with stakeholders and end users to understand their needs, research opinions for their work and develop the software or system that meets requirements. Software engineers also write user manuals and conduct testing and quality assurance analysis to make sure users can navigate through the software.

14. Actuary

An actuary examines how risk or other uncertainties can financially affect a business. They help company stakeholders choose policies, like health insurance and life insurance, that have a lower financial risk to the business. This helps businesses make better decisions with their finances, generating better profits and driving investment decisions. To become an actuary, you can obtain a bachelor's degree in mathematics, statistics, economics or a related field, and then pass a series of professional exams offered by actuarial organizations.