shine

Niche jobs that need maths

Maths · Discovery handout · 42 roles to look up

Tick three that surprise you, then find out how to work towards them on Shine.

- ☐ **Actuary**
  Uses statistics to price risk for insurers and pensions
- ☐ **Air traffic controller**
  Calculates safe distances between aircraft
- ☐ **Algorithm engineer**
  Designs step-by-step rules computers follow
- ☐ **Biostatistician**
  Analyses data from medical trials
- ☐ **Bookmaker trader**
  Sets odds using probability
- ☐ **Building surveyor**
  Measures and assesses buildings
- ☐ **Cartographer**
  Turns coordinates into accurate maps
- ☐ **Cost estimator**
  Works out what projects will cost
- ☐ **Credit analyst**
  Judges whether loans can be repaid
- ☐ **Cryptographer**
  Uses maths to protect secret data
- ☐ **Data analyst**
  Finds patterns in large sets of numbers
- ☐ **Demographer**
  Studies population size and change
- ☐ **Econometrician**
  Tests economic ideas with statistics
- ☐ **Energy assessor**
  Calculates how efficient homes are
- ☐ **Fantasy sports analyst**
  Models player performance
- ☐ **Forensic accountant**
  Follows money trails in fraud cases
- ☐ **Game economy designer**
  Balances in-game prices and rewards
- ☐ **Geomatics technician**
  Measures land using GPS and lasers
- ☐ **Hydrologist**
  Models rivers, rainfall and flooding
- ☐ **Insurance underwriter**
  Decides cover and prices risk
- ☐ **Logistics planner**
  Plans fastest, cheapest delivery routes
- ☐ **Machine learning engineer**
  Builds systems that learn from data
- ☐ **Meteorologist**
  Uses models to forecast weather
- ☐ **Mortgage adviser**
  Explains repayments and interest
- ☐ **Operational researcher**
  Uses maths to improve how organisations run
- ☐ **Payroll officer**
  Calculates pay, tax and deductions
- ☐ **Pharmacy technician**
  Measures and checks medicine doses
- ☐ **Quantity surveyor**
  Manages building costs and materials
- ☐ **Quantitative analyst**
  Builds financial models for banks
- ☐ **Rail timetable planner**
  Fits trains into a working schedule
- ☐ **Sports performance analyst**
  Turns match data into tactics
- ☐ **Statistician**
  Collects and interprets data
- ☐ **Structural engineer**
  Calculates loads so buildings stand up
- ☐ **Supply chain analyst**
  Predicts stock and demand
- ☐ **Tax adviser**
  Helps people and firms work out tax
- ☐ **Toolmaker**
  Machines parts to tiny tolerances
- ☐ **Traffic modeller**
  Predicts how roads will cope
- ☐ **Animator rigger**
  Uses geometry to make characters move
- ☐ **Acoustic consultant**
  Calculates how sound travels in spaces
- ☐ **Navigation officer**
  Plots ship and aircraft courses
- ☐ **Pricing analyst**
  Sets prices using sales data
- ☐ **Auditor**
  Checks that accounts add up

Find out how to work towards jobs like these

Free for 16–24s: build your plan at shineai.tech/signup

Instagram & TikTok @shineaiapp · LinkedIn: Shine AI · contact@shineai.tech

Job details, pay and entry routes: nationalcareers.service.gov.uk