

Careers at SVCS.

'Careers in **Mathematics and Statistics**

Mathematics and Statistics creates opportunities in many careers, specifically:

- Actuary
- Climate Scientist
- Data Scientist
- Engineer
- Finance
- GCHQ/Cyber Security
- Hydrologist
- Journalist (Science)
- Logistics And Transport Planning
- Mathematical Modeller
- Maths Biologist
- Nuclear Scientist
- Operational Researcher
- Programmer
- Quantitative Analyst (Quant)
- Researcher In Applied Maths
- Statistician
- Teacher
- UAT Tester
- Volcanologist
- Weather Forecaster (Meteorologist)
- X-Ray Expert (Radiographer)
- YouTuber

In addition to this, it provides transferable skills such as:

- ✓ **Critical Thinking and Problem Solving.** In mathematics, students and educators learn and apply strategies to understand and solve problems flexibly, accurately, and efficiently. They learn to understand and visualize a situation and use the tools and language of mathematics to reason, make connections to real-life situations, communicate, and justify solutions.
- ✓ **Innovation, Creativity, and Entrepreneurship.** In mathematics, students and educators solve problems with curiosity, creativity, and a willingness to take risks. They pose questions, make and test conjectures, and consider problems from different perspectives to generate new learning and apply it to novel situations.
- ✓ **Self-Directed Learning.** By reflecting on their own thinking and emotions, students, with the support of educators, can develop perseverance, resourcefulness, resilience, and a sense of self. In mathematics, they initiate new learning, monitor their thinking and their emotions when solving problems and apply strategies to overcome challenges. They see mathematics as useful, interesting, and doable and confidently look for ways to apply their learning.

- ✓ **Collaboration.** In mathematics, students and educators engage with others productively, respectfully, and critically in order to better understand ideas and problems, generate solutions, and refine their thinking.
- ✓ **Communication.** In mathematics, students and educators use the tools and language of mathematics to describe their thinking and to understand the world. They use mathematical vocabulary, symbols, conventions, and representations to make meaning, express a point of view, and make convincing and compelling arguments in a variety of ways, including multimodally, for example, using combinations of oral, visual, textual, and gestural communication.
- ✓ **Global Citizenship and Sustainability.** In mathematics, students and educators recognize and appreciate multiple ways of knowing, doing, and learning, and value different perspectives. They see how mathematics is used in all walks of life and how engaged citizens can use it as a tool to raise awareness and generate solutions for real-life issues.
- ✓ **Digital Literacy.** In mathematics, students and educators learn to be discerning users of technology. They select when and how to use appropriate tools to understand and model real-life situations, predict outcomes, and solve problems, and they assess and evaluate the reasonableness of their results.

For further information on careers in Maths:

<https://www.mathscareers.org.uk/>

https://www.learndirect.com/landing-page/a-level-maths?utm_term=mathematics%20at%20a%20level&utm_campaign=A%26G+-A+Level%26+GCSE&utm_source=adwords&utm_medium=ppc&hsa_acc=1295684994&hsa_cam=9730570037&hsa_grp=146145788089&hsa_ad=634170055900&hsa_src=q&hsa_tgt=kwds-815315648298&hsa_kw=mathematics%20at%20a%20level&hsa_mt=p&hsa_net=adwords&hsa_ver=3&qad_source=1&qclid=EAIalQobChMluOLcllvhqMV95JQBh08Eac6EAAYASAAEgLISvD_BwE