

The Career Centre

# What can I do with my major in

Mathematics Specialisation in Data Science for Artificial Intelligence



## Where do Mathematicians and AI specialists work?

Graduates from this degree are mathematicians capable of successfully applying their skills in the various fields of Al. The opportunities for skilled mathematicians and Al professionals span nearly every industry, including:

- Research & development firms
- Financial services
- Insurance agencies
- · Engineering firms
- Technology

- IoT-enabled systems
- Healthcare
- National security
- Government and military
- Media
- Marketing

- Utility companies
- Agriculture
- Technical journals
- Education
- Gaming
- Retail

Based on interests, experience and further studies, some of the job sectors and career options available to graduates after a Bachelor's degree in Mathematics are listed below. While other career paths are possible, a solid education and training in Applied Mathematics. Computer Science and Artificial Intelligence allows graduates from this Bachelor to address the challenges of the Smart Industry and the Digital Economy.

### Data Science, Machine Learning and AI Applications

- · Al researcher / analyst / engineer
- · Data scientist / analyst / engineer
- · Machine learning engineer / developer
- Statistician
- Computational linguist / NLP engineer
- Quantitative analyst
- Al systems architect
- Research Scientist
- Entrepreneur: creation and management of technology-based companies
- Big data engineer / architect / visualiser
- Specialist data consultant
- · Robotics engineer / scientist
- Technological consultant / analyst
- Computer-aided design technician
- Analytics consultant
- Demographer

### Cryptography, Cybersecurity and IT Consulting

- Cryptography research engineer
- Cybersecurity expert / analyst
- Software developer / analyst
- Blockchain developer
- Systems analyst
- IT Security Analyst
- Cloud engineer

#### Actuarial Sciences, Finance and Banking

- Insurance actuarial analyst
- Actuarial consultant
- · Chartered accountant
- Financial Analyst
- Credit analyst
- Portfolio manager
- Market operator
- Trader
- Financial analyst
- Loan officer
- Economist
- Treasury management specialist

#### **Business, Management and Marketing**

- Sales Engineer
- · Business intelligence developer / analyst
- Marketing operations analyst
- Market research analyst
- Technical writer
- IT consultant

### Research, Academia and Public sector

- Professor
- Researcher
- Civil servant

### **Further studies options**

A whole range of postgraduate studies are available after a Bachelor's degree in Mathematics. Graduates from this programme are well-equipped to study, research or start an Academic career by pursuing a Master's and a PhD in fields related to Mathematics. Data Science and Machine Learning in renowned universities and research institutions.

### Examples of areas of specialisation (Master and PhD) include:

- Al and Data Science
- Robotics
- Data Analytics and Machine Learning
- Computational Mechanics
- Computer Science
- Statistics
- Accounting
- Business Administration

- Engineering
- Physics

- Healthcare
- Education
- Space exploration
- Innovation management

### Where do SUAD graduates go following a **Bachelor degree in Mathematics?**

To pursue their studies or research, graduates may apply to prestigious institutions such as:

- France: Sorbonne Université, Université de Paris, Université Paris-Saclay
- Belgium: Catholic University of Leuven, Free University of Brussels
- · Germany: Technical University of Berlin, Humboldt University of Berlin
- . Hong Kong: Hong Kong University of Science and Technology, City University of Hong Kong, Chinese University of Hong Kong
- Singapore: National University of Singapore, Nanyang Technological University
- Switzerland: Swiss Federal Institute of Technology Zurich, Federal Institute of Technology Lausanne
- United Kingdom: University of Oxford, University of Cambridge, Imperial College London, University of Edinburgh
- United States of America: Princeton University, Massachusetts Institute of Technology, Stanford University, Harvard University, University of California - Berkeley, Carnegie Mellon University, California Institute of Technology, and New York University.

Postgraduate admission requirements in terms of eligible and relevant undergraduate degrees vary widely from country to country and from one higher institution to another. Candidates may refer to the admission requirements applicable to each institution.

### **Best career exploration** websites for students

### In English

acad.jobs ams.org amstat.org beanactuary.org bigmathnetwork.org euromathsoc.org mathcareers.maa.org mathhire.org mathjobs.org siam.org ufrmath.sorbonne-universite.fr careerbuilder.com careerpath.com careertoolkits.com learnhowtobecome.org mvmaiors.com prospects.ac.uk thebalancecareers.com targetiobs.co.uk

### In French

smf emath fr letudiant.fr onisep.fr apec.fr cidj.com fichemetier fr orientation-education.fr studyrama.com

### For more information, please contact:

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