NUS National University of Singapore | Faculty of Science

DOCTOR OF PHILOSOPHY (PhD) IN
MATHEMATICS

OVERVIEW

The Department of Mathematics at NUS has been ranked 1st among Asian Universities and top 20 worldwide in recent QS World University Rankings by Subject. The Department offers a diverse and vibrant graduate programme in fundamental and applied mathematics. Faculty members' research covers all major areas of contemporary mathematics.

The Doctor of Philosophy (PhD) in Mathematics programme is designed to provide advanced research training in mathematical sciences. Students enrolled into the programme will have the opportunity to work with prominent researchers in Pure and Applied Mathematics. They will also interact with faculty members and renowned visiting mathematicians at colloquiums and seminars as well as participate in overseas research attachments and conferences with financial support.

FACULTY

The Department of Mathematics has prominent researchers in major research themes such as Combinatorics, Dynamical Systems, Geometry & Topology, Imaging & Vision Science, Machine Learning, Mathematical Finance and Mathematical Economics, Mathematical Logic & Theoretical Computer Science, Numerical Analysis & Scientific Computing, Optimization, Partial Differential Equations, Representation Theory & Automorphic Forms.

CAREER OPPORTUNITIES

Graduates of our PhD in Mathematics programme are highly sought after in both academia and industry:

- Postdocs and faculty positions at leading universities worldwide:
  - USA: UC Berkeley, Yale University, University of Chicago, University of Wisconsin–Madison, University of Maryland-College Park, University of Minnesota
  - UK: University of Oxford
  - France: Centre national de la recherche scientifique , Institut de recherche en informatique et en automatique
  - Austria: University of Vienna
  - China: Tsinghua University, Fudan University
- Research Scientists at leading institutes worldwide:
  - China: Chinese Academy of Sciences
  - Singapore: Temasek Laboratories, A*STAR institutes such as Institute of High Performance Computing, Bioinformatics Institute.
- Quantitative Analysts and Risk Managers at leading companies worldwide including ANZ Bank, Barclays, Credit Suisse, Deutsche Bank, DBS Bank, JP Morgan, Nomura, Standard Chartered Bank, UBS AG.

PROGRAMME STRUCTURE AND CANDIDATURE

The programme has two intakes per academic year, in August and January.

Candidates are also expected to:

- Pass PhD Qualifying Examination within the first 24 months;
- Pass the English language course offered by NUS;
- Pass a prescribed list of courses;
- Maintain a minimum Grade Point Average (GPA) of 3.5 (out of 5.0) ('B' grade on average);
- Complete a thesis and oral defense to the satisfaction of the examination panel;
- Complete the above requirements within 5 years (maximum candidature).

ADMISSION REQUIREMENTS

- Minimum 4-year Honours degree (or its equivalent) in mathematics or in a related area with strong mathematics training.
- Evaluation criteria include academic records and references, and undergraduate research experiences (if any). Admission is on a competitive basis;
- A candidate whose medium of undergraduate instruction is not English is required to submit TOEFL (with the minimum score 85 for the internet-based test) or IELTS (with the minimum score 6.0).
- Candidates are strongly encouraged to take the GRE test and submit their results.

RESEARCH SCHOLARSHIPS

- Full tuition waiver plus monthly stipend of S$3,200/S$3,700 before/after the Qualifying Exam (for international students).
- There are also various fellowship opportunities with a higher stipend available (and are awarded on a competitive basis).
- Financial assistance is available to support conferences/summer or winter school.

For more information about various scholarships, please refer to **https://nusgs.nus.edu.sg/scholarships/**

TO APPLY

- Online via NUS Graduate Admission System: https://gradapp.nus.edu.sg/apply
- Regular admission application periods:
  - January 2026 Intake: 1 January to 15 May 2025
  - August 2026 Intake: 16 May to 15 November 2025

Scan the **QR code** for detailed information about the Programme