NUS National University of Singapore | Department of Mathematics Faculty of Science

B.Sc. (Hons) with Major in Mathematics with Specialisation in Pure Mathematics

Graduation Requirements for students admitted in AY2021/2022 or after

To be awarded a **B.Sc.(Hons) with primary major in Mathematics with Specialization in Pure Mathematics (PM)**, in addition to the University, College and primary major in Mathematics requirements, a candidate must satisfy the following:

Course Level	Major Requirements	Level Units	Cumulative Major Units
1000	1. Pass MA1100/MA1100T Basic Discrete Mathematics	4	4
2000	2. Pass all the following courses: • MA2001 Linear Algebra I • MA2002 Calculus • MA2101/MA2101S Linear Algebra II • MA2104 Multivariable Calculus • MA2108/MA2108S Mathematical Analysis I • MA2116/MA2216/ST2131 Probability 3. Pass two additional courses coded MA22xx/MA32xx/MA42xx (except MAx288/MAx289/MAx288x/MAx289x/~~MA4288x~~)	32-36	36-40
3000	4. Pass *five courses coded MA32xx/MA42xx/MA52xx/MA62xx (except MAx288/MAx289/ MAx288x/ MAx289x /~~MA4288x/MA5232/MA5266~~) or ST3236 or ST4238 *At most three courses (12 Units) can be coded MA52xx/MA62xx	20-23	56-62
4000	5. Pass MA4198 Mathematics Capstone Project 6. Pass five* additional courses from List PM *The five courses used to satisfy item 6 cannot be concurrently used to satisfy item 3 or 4.* **MA4288P Undergraduate Project in Mathematics may be used to replace one of these courses*	24	80-86

List PM

- MA4203 Galois Theory
- MA4207 Mathematical Logic
- MA4211 Functional Analysis
- MA4221 Partial Differential Equations
- MA4229 Fourier Analysis and Approximation
- MA4233 Dynamical Systems
- MA4262 Measure and Integration
- MA4266 Topology
- MA4271 Differential Geometry in Curves and Surfaces
- MA4273 Algebraic Geometry in Curves and Surfaces

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