(For students admitted in 2012-13 under the 3-year degree)

Curriculum for BSc in Mathematics - Pure Mathematics Option - Advanced Stream

General Requirements

Students are required to complete the following general requirements for graduation in addition to program specific requirements:

Required Courses in English Communication
Common Core Requirements
Required Course in Physical Education

For details please refer to the section "General Requirements" on this website.

Program Specific Requirements

Credit(s)

Required courses

	MATH 2023	Multivariable Calculus	4
	MATH 2043	Honors Mathematical Analysis	4
	MATH 2131	Honors in Linear and Abstract Algebra I	4
	MATH 2352	Differential Equations	4
	MATH 3043	Honors Real Analysis	4
	MATH 3131	Honors in Linear and Abstract Algebra II	4
(1)	MATH 4023	Complex Analysis	3
	MATH 4033	Calculus on Manifolds	3
(1)	MATH 4051	Theory of Ordinary Differential Equations	3
(1)	MATH 4141	Number Theory and Applications	3
(1)	MATH 4223	Differential Geometry	3
(1)	MATH 4225	Topology	3
(2)	PHYS 2411	Physics I	4
	COMP 1022P	Introduction to Computing with Java	3

Elective courses

	Elective types		Minimum no. of courses	Minimum total credits
(3,5)	MATH	Mathematics Elective	2	6
(4,5)	FREE	Free Elective	4	12

Notes:

(1) Students are required to take at least two out of these five courses in the second year.
(2) This course can be replaced by PHYS 2421 provided that enrolment quota is available.
(3) All MATH electives must be 3000-level or above.
(4) ISOM 2500 cannot be used to satisfy any FREE elective requirement.

(5) Unless otherwise approved by the Department, mathematics courses coded from 1000 to 1600 cannot be used to fulfill any MATH or FREE elective requirements.

For graduation, students are required to complete both the general requirements and requirements specified for the program, and to earn a minimum of 90 credits.