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

Curriculum for BSc in Mathematics - Pure Mathematics Option

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 2021	Multivariable and Vector Calculus	4
	MATH 2031	Introduction to Real Analysis	4
	MATH 2121	Linear Algebra	4
	MATH 2352	Differential Equations	4
(1)	MATH 3033	Real Analysis	4
(1)	MATH 3121	Algebra I	3
(1)	MATH 4023	Complex Analysis	3
(1,2)	MATH 4141	Number Theory and Applications	3
(1,3)	MATH 4221	Euclidean and Non-Euclidean Geometries	3
(4)	PHYS 2411	Physics I	4
	COMP 1022P	Introduction to Computing with Java	3

Elective courses

	Elective types		Minimum no. of courses	Minimum total credits
(5,7)	MATH	Mathematics Elective	5	15
(6,7)	FREE	Free Elective	5	15

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 MATH 4121 provided that enrolment quota is available.

(3) This course can be replaced by MATH 4223 provided that enrolment quota is available.

(4) This course can be replaced by PHYS 2421 provided that enrolment quota is available.

(5) MATH electives are recommended to be chosen from MATH 2421, MATH 2721, MATH 4051, MATH 4052, MATH 4151, MATH 4223, MATH 4321. At least three MATH electives must be at 4000-level or above. Students who have used MATH 4223 to count as Required Course in the curriculum cannot reuse it to satisfy the MATH Elective requirement.

(6) ISOM 2500 cannot be used to satisfy any FREE elective requirement.

(7) 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.