(For students admitted in 2011-12 under the 3-year degree)

Curriculum for BSc in Mathematics - Mathematics and Physics 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 2023	Multivariable Calculus	4
	MATH 2033	Mathematical Analysis	4
	MATH 2121	Linear Algebra	4
	MATH 2352	Differential Equations	4
(1)	MATH 3033	Real Analysis	4
(2)	MATH 4023	Complex Analysis	3
	MATH 4052	Partial Differential Equations	3
	PHYS 2022	Modern Physics	3
	PHYS 2023	Modern Physics Laboratory	1
	PHYS 2421	Fundamentals of Physics	4
	PHYS 3032	Classical Mechanics	3
	PHYS 3033	Electricity and Magnetism I	3
	PHYS 3036	Quantum Mechanics I	3
	PHYS 4050	Thermodynamics and Statistical Physics	3
(3)	PHYS 4051	Quantum Mechanics II	3

Elective courses

	Elective types		Minimum no. of courses	Minimum total credits
(4)	MATH	Mathematics Elective	3	12
(5)	FREE	Free Elective	4	13-14

Notes:

(1) MATH 3033 can be replaced by MATH 3121 or MATH 4223 provided that enrolment quota of these courses is available.

(2) MATH 4023 can be replaced by MATH 4223 provided that enrolment quota is available.

(3) PHYS 4051 can be replaced by PHYS 3034 provided that enrolment quota is available.

(4) For Mathematics elective courses, one must be of 3000-level or above and the rest must be of 4000-level or above.

(5) Students are not permitted to take more than eight credits of 1000-level courses as free elective. Free electives must be at 3000-level or higher if physics courses are chosen with the exception of PHYS 2021 and PHYS 2080, and at 2000-level or higher if mathematics courses are chosen. For those who opt for PHYS 4051, the minimum total credits for free electives will be 13 and for those who opt for PHYS 3034, the minimum total credits for free electives will be 14.

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.