

Curriculum for BSc in Mathematics - Statistics Option

Major Program Requirements

Core courses

MATH 102	Multivariable Vector Calculus	[2-1-0:4]
MATH 111	Linear Algebra	[3-1-0:4]
MATH 202	Introduction to Real Analysis	[2-1-0:4]

Required courses

MATH 241	Probability	[3-1-0:4]
MATH 243	Statistical Inference	[3-1-0:4]
MATH 301	Real Analysis	[3-1-0:4]
(1) MATH 311	Algebra I	[3-1-0:4]
MATH 341	Stochastic Modeling	[3-1-0:4]
MATH 342	Regression Analysis	[3-1-0:4]
MATH 343	Data Analysis	[3-1-0:4]
MATH 347	Multivariate Analysis	[3-1-0:4]
COMP 102	Computer and Programming Fundamentals I	[3-0-2:3]

Elective courses

Elective types		Minimum no. of courses	Minimum total credits
(2) MATH	Mathematics Elective	4	12
(3) FREE	Free Elective	2	6
(5) SB&M	Business and Management Elective	2	6

Note: Unless otherwise approved by the Department, zero-level mathematics courses cannot be used to fulfill any MATH or FREE elective requirements.

General Education Requirements

Electives must be selected from amongst those general education courses that are listed under the section “Designated General Education Courses for Undergraduate Students”. Credits earned from a general education course that is listed under the Pilot Program for Developmental and Learning Skills can be counted towards any one type of the general education electives specified below.

Elective types		Minimum no. of courses	Minimum total credits
GEE(ENGG)	Engineering General Education Elective	1	6
(3,4) GEE(SB&M)	Business and Management General Education Elective	1	
(5) GEE(H&SS)	Humanities and Social Science General Education Elective	4	

Required Courses in English Communication

LANG 108	English for Science Students	[0-2-0:2]
LANG 208	English Communication for Science Students I	[0-2-0:1]

LANG 209	English Communication for Science Students II	[0-2-0:1]
LANG 308	English Communication for Science Students III	[0-2-0:1]

Other Requirement

(6) HLTH 001	Healthy Life Style	[0 credit]
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Notes:

- (1) The course can be replaced by MATH 303, MATH 304 or MATH 321 provided that enrolment quota of these courses is available.
- (2) MATH 144, MATH 345, MATH 346 and MATH 348 can be replaced by MATH 306, MATH 310, MATH 361, MATH 362, MATH 393, ISOM 352, ISOM 355, ISOM 359, ISOM 386 provided that enrolment quota of these courses is available.
- (3) Free electives must include MATH 151. ISOM 111 cannot be used to satisfy any FREE elective requirement as well as the GEE(SB&M) requirement.
- (4) ECON 110/111/191 and ECON 112 are recommended electives. Students entering with AL Economics take ECON 111; however, those with grade B or above in HKAL Economics will take ECON 191. All other students without AL Economics background, including those entering with AL Business and Economics, take ECON 110. These recommended ECON electives may be replaced by SB&M courses that are listed as designated general education courses in the year the student was first admitted. However, the credits earned from these SB&M courses cannot be used to also count toward the GEE(SB&M) requirement.
- (5) Of these courses, at least one course in Humanities and one in Social Science are required.
- (6) Students are required to take and pass this course in their first year of study. Details of the course and its requirements are announced on the course website <http://www.ab.usst.hk/sao/HLTH001> managed by the Student Affairs Office.

A minimum of 101 credits is required for the BSc program in Mathematics - Statistics Option. Students must take additional course(s) and/or elective(s) of higher-than-required credit value to meet this minimum total of 101 credits.

Recommended Pattern of Study for BSc in Mathematics - Statistics Option

1st year	Fall	C MATH 102, MATH 111, MATH 202 R COMP 102, HLTH 001, LANG 108 E MATH 144	(Total: 11 credits)
	Spring	C MATH 102, MATH 202 R MATH 241, HLTH 001, LANG 108 E ECON 110, GEE(H&SS)	(Total: 21* credits)
2nd year	Fall	R MATH 243, MATH 301, LANG 208 E MATH 345, ECON 112, GEE(H&SS)	(Total: 20 credits)
	Spring	R MATH 341, MATH 342, LANG 209 E MATH 151, MATH 346, GEE(ENGG)	(Total: 20 credits)
3rd year	Fall	R MATH 311, MATH 343, MATH 347, LANG 308 E GEE(H&SS)	(Total: 16 credits)
	Spring	E MATH 348, GEE(H&SS), GEE(SB&M), FREE	(Total: 13 credits)

* LANG 108, MATH 102 and MATH 202 are two-semester courses. The course credits will be earned on completion of the courses at the end of 1st year Spring.

C = core course; R = required course; E = elective course