

Course offerings 2026-2027

Requirements:

MPhil students: SSAF6001, MATH6001 and 3 elective courses

PhD students: SSAF6001, MATH6001 and 4 elective courses

For students enrolled before Jan 2015: SSAF6001, 1 compulsory and 3 elective courses

Courses offered - Full Year

Course Code	Course Title	Compulsory / Elective	Remarks
SSAF6001	Basic Laboratory Safety Course for RPg Candidate in the Faculty of Science	Compulsory	1st Sem: October 15, 2026 (Thu) 14:00 - 18:00 at CYPP2 2nd Sem: TBC
MATH6001	Guided Study in Mathematics	Compulsory	
MATH6002	Selected Topics in Mathematics	Elective	
MATH6903	Independent Studies	Elective	

Courses offered - Semester 1, 2026-2027

Course Code	Course Title	Compulsory / Elective	Instructor	Class Schedule	Venue
MATH6014	Topics in Advanced Numerical Analysis	Elective	Prof. Zhiwen Zhang	Fri: 17:00 – 19:50	MB142
MATH6101	Intermediate Complex Analysis	Elective	Prof. Ngaiming Mok	Wed: 13:00 – 15:50	RR210
MATH6219	Topics in Applied Functional Analysis	Elective	Prof. Dong Li	Wed: 17:30 - 19:50	RR210
MATH6224	Topics in Advanced Probability Theory	Elective	Prof. Guangyue Han	Tue: 13:00 – 14:50	LE2
				Fri: 13:00 – 14:50	MWT3
MATH6501	Topics in Algebra	Elective	Prof. Zheng Hua	Thu: 09:00 – 11:50	EH102
MATH7301	Lie Groups and Lie Algebras	Elective	Prof. Xuhua He	Thu: 09:00 – 11:50	KKLG110

Courses offered - Semester 2, 2026-2027

Course Code	Course Title	Compulsory / Elective	Instructor	Class Schedule	Venue
MATH6015	Topics in Artificial Intelligence and Machine Learning	Elective	Prof. Yunwen Lei	Wed: 18:30 – 21:20	CYCP1
MATH6207	Topics in Applied Mathematics	Elective	Prof. Kuang Huang	Fri: 16:00 – 18:50	MW103
MATH6216	Stochastic Processes	Elective	Prof. Wei Qian	Fri: 12:00 – 14:50	MW325
MATH6502	Topics in Applied Discrete Mathematics	Elective	Prof. Wenan Zang	Mon: 11:00 – 11:50	MWT6
				Thu: 13:00 – 14:50	
MATH6503	Topics in Advanced Optimization	Elective	Dr. Hanyu Hu	Tue: 16:00 – 18:50	MWT6
MATH6505	Real Analysis	Elective	Prof. Chun Yin Hui	Mon: 11:00 – 12:50	KKLG110
				Tue: 12:00 – 12:50	MW103
MATH7302	Topics in Number Theory	Elective	Prof. Benjamin Kane & Prof. Yuk Kam Lau	Wed: 14:00 – 16:50	MB256
MATH7304	High Dimensional Probability	Elective	Prof. Văn Hà Vũ	Wed: 14:00 – 16:50	KKLG101
MATH7305	Percolation and Ising model	Elective	Prof. Pierre Nolin	Wed: 15:00 – 17:50	KKLG107
MATH8008	Scalable Optimization Methods in Data Science	Elective	Dr. Yue Xie	TBC	TBC