

**Hong Kong Baptist University**  
**Curriculum for Minor Programmes**

**Minor Programme : Applied Mathematics (\*APMATH)**

Course Group	Course	Course Title	Unit	Core (C) / Elective (E)
<b>Applied Mathematics Minor Core Courses (#R-APMATH-CORE-001)</b>				
	MATH1005	Calculus	3.00	E
	MATH1006	Advanced Calculus I	3.00	E
	MATH2207	Linear Algebra	3.00	E
<b>Applied Mathematics Minor Elective Courses (#R-APMATH-ELECT-001)</b>				
	MATH2205	Multivariate Calculus	3.00	E
	MATH3206	Numerical Methods I	3.00	E
	MATH3405	Ordinary Differential Equations	3.00	E
<b>Applied Mathematics Minor Elective Courses (#R-APMATH-ELECT-002)</b>				
	MATH1205	Discrete Mathematics	3.00	E
	MATH2206	Probability and Statistics	3.00	E
	MATH2215	Mathematical Analysis	3.00	E
	MATH2216	Statistical Methods and Theory	3.00	E
	MATH2217	Advanced Calculus II	3.00	E
	MATH3205	Linear and Integer Programming	3.00	E
	MATH3406	Abstract Algebra	3.00	E
	MATH3407	Advanced Linear Algebra	3.00	E
	MATH3415	Vector Calculus	3.00	E
	MATH3416	Complex Analysis	3.00	E
	MATH3425	Graph Theory	3.00	E
	MATH3426	Number Theory	3.00	E
	MATH3427	Real Analysis	3.00	E
	MATH3605	Numerical Methods II	3.00	E
	MATH3606	Partial Differential Equations	3.00	E
	MATH3615	Introduction to Imaging Science	3.00	E
	MATH3616	Numerical Methods for Differential Equations	3.00	E
	MATH3625	Advanced Numerical Analysis	3.00	E
	MATH4206	Financial Derivatives	3.00	E
	MATH4207	Computational Finance	3.00	E
	MATH4216	Mathematical Finance	3.00	E
	MATH4406	Differential Geometry	3.00	E
	MATH4606	Functional Analysis	3.00	E
	MATH4615	Introduction to Numerical Linear Algebra	3.00	E
	MATH4665	Special Topics in Applied Mathematics I	3.00	E
	MATH4666	Special Topics in Applied Mathematics II	3.00	E
	MATH4667	Special Topics in Applied Mathematics III	3.00	E
	MATH4816	Optimization Theory and Techniques	3.00	E
	MATH4817	Stochastic Models	3.00	E

- Remarks:
1. Students are required to take the core courses of MATH1005 or MATH1006, and MATH2207; one course from #R-APMATH-ELECT-001; and two courses from either #R-APMATH-ELECT-001 or #R-APMATH-ELECT-002. At least one course must be at Level 3 or 4.
  2. Students who have taken MATH2005 or MATH2006 are not allowed to take MATH2206. They are required to take another elective course from #R-APMATH-ELECT-001 or #R-APMATH-ELECT-002 to fulfill the Minor requirement.
  3. BSC CIS and BSC COMP SCI students are not allowed to use MATH1205 to fulfill the Minor requirement.
  4. Students of Faculty of Science are not allowed to use MATH1005 or MATH1006 to fulfill the Minor requirement. They are required to take another elective course from #R-APMATH-ELECT-001 or #R-APMATH-ELECT-002.