### **Double Master Degree Programme:**

## **Master of Science in Mathematical Finance**

(Hong Kong Baptist University)

# Master of Science in Finance, Investment and Risk

(University of Kent)

## **Programme Intended Learning Outcomes (PILOs)**

The programme aims to develop mathematical finance and financial markets practitioners and provide expertise in the effective management of financial markets. By the end of the programme, the students should be able to:

- 1. explain the fundamental principles of mathematical finance and financial engineering;
- 2. explain the mechanism of financial markets and financial contracts in finance industry;
- 3. create new mathematical models of financial processes and instruments;
- 4. apply trading and investments skills;
- 5. communicate financial knowledge and findings in oral and written form effectively and professionally; and
- 6. appraise the impact and the diverse applications of mathematical finance and financial engineering in financial industry.

## **Alignment of PILOs to the HKBU Graduate Attributes**

HKBU has identified six Graduate Attributes for Taught Postgraduate Graduates. On graduation, HKBU Taught Postgraduate graduates should have:

#### 1. Knowledge

Mastery of knowledge of their academic specialty or profession that is in-depth, advanced and up-to-date and be able to apply the knowledge to their profession or disciplines.

#### 2. Creativity

The ability to evaluate and apply knowledge to make critical and independent judgement, and provide creative and innovative solutions to problems.

#### 3. Skills

The ability to apply appropriate theories, methodologies and techniques for professional or disciplinary advancement in their fields.

#### 4. Learning

An on-going interest and capability in continuous learning for the purpose of tackling the complexities in their professional field or discipline through inquiry and critical reflection.

#### 5. Communication

The ability to synthesize and articulate ideas clearly, coherently, and in a logical way, with fluent communication skills.

### 6. Citizenship

A sense of upholding professional ethics and social responsibility consistent with their roles as local and global citizens.

## **Graduate Attributes – PILOs Mapping Matrix**

PILOs/ HKBU	GA1	GA2	GA3	GA4	GA5	GA6	No. of GAs	
Graduate							addressed by	
Attributes							this PILO	
(GAs)								
PILO1	<b>✓</b>		✓	✓			3	
PILO2	✓		✓	✓			3	
PILO3		✓		✓			2	
PILO4		✓	✓	✓			3	
PILO5		✓		✓	✓		3	
PILO6				✓		✓	2	
No. of PILOs								
addressing this	2	3	3	6	1	1		
GA								

## **Course Mapping of Programme Intended Learning Outcomes**

	Core Courses											Elective				
	MFFM7010	MFFM7020	MFFM7030	MFFM7040	MFFM7050	MFFM7060	MFFM7070	MFFM7100	MFFM7120	MFFM7150	MFFM7160	MFFM7170	MFFM7080	MFFM7110	MFFM7180	MFFM7190
PILO1	✓		✓	✓	✓		✓	✓	✓	✓				✓		
PILO2		✓				✓				✓	✓	✓	✓			✓
PILO3		✓				✓					✓		✓	✓	✓	✓
PILO4									✓	✓						✓
PILO5									✓			✓			✓	
PILO6		✓				✓					✓	✓	✓	✓		