Continuing Education Diploma in

Professional Financial Risk Management

Features

- Provides a route for students to attain a Continuing Education Diploma for further studies and career advancement and, at the same time, familiarizes students with the syllabus of the Financial Risk Manager (FRM®) examination.
- Benchmarks the syllabus of Part I and Part II of the FRM® examination.
- Taught by FRM® qualified instructors and practitioners in the financial services field.
- Grants exemption to students holding equivalent education qualifications.
- Includes access to CityU library and computing services.

Programme Code: 112-40020 | 5th Intake
Continuing Education Diploma in Professional Financial Risk Management 5th Intake

Aims and Objectives

The programme aims to enhance students’ knowledge in finance and basic skills in financial risk management and also to familiarize them with the syllabus of the Financial Risk Manager (FRM®) Examination organized by the Global Association of Risk Professionals (GARP).

Upon successful completion of this programme, participants will:

- have developed an understanding of different financial risks arising from the rapidly changing market environment;
- have mastered the theories and concepts of financial risk management;
- understand how risk managers apply risk management concepts and approaches to day-to-day activities;
- be familiar with legal risk and ethics in the financial sector.

The Global Association of Risk Professionals (GARP)

The Global Association of Risk Professionals (GARP) is a not-for-profit organization and is the only globally recognized membership association for risk managers. GARP’s goal is to help create a culture of risk awareness within organizations, from entry level to board level. In the areas of financial and energy risk management, GARP sets the global standard in professional designation with the FRM® (Financial Risk Manager) and ERP® (Energy Risk Professional) certifications. Through trusted education and training, media, and events, GARP promotes best practices in risk management and supports ongoing professional and career development for risk managers.

GARP has over 150,000 members, from 195 countries and territories. Members are employed by commercial banks, central banks, investment banks, asset management firms, corporations, government agencies, and academic institutions.

Financial Risk Manager (FRM®) Examination

FRM is the certification recognized among financial risk professionals worldwide, with over 24,000 FRM holders in 90 countries across the globe. Financial risk management is one of the hottest skill sets to have in the financial services industry today that offers excellent visibility and outstanding earnings potential. The profession has seen considerable growth over the past 15 years fueled by the complexity of financial products, increased regulation and recent notable failures.

The FRM examination covers all the key areas of risk and the questions are presented in the context of real-world situations that a candidate might face.

Benefits of FRM® Certification

The FRM® Certificate has been adopted by companies as a benchmark to ensure their risk management employees are well versed in the latest financial risk concepts. The Certificate identifies risk professionals who are qualified to provide competent advice based on globally accepted industry standards and who are committed to personal professional development.

FRM® Examination Date:

May and November every year (exact examination date to be confirmed by GARP)

(For more information on the FRM® qualification and examination, please visit the GARP website www.garp.com)

Candidates Registered for FRM® Examination
## Programme Structure

The programme consists of 9 modules, over a total of 198 hours:

### Module 1 Quantitative Analysis (24 hours)
- Discrete and continuous probability distributions
- Population and sample statistics
- Statistical inference and hypothesis testing
- Estimating the parameters of distributions
- Graphical representation of statistical relationships
- Linear regression with single and multiple regressors
- The Ordinary Least Squares (OLS) method
- Interpreting and using regression coefficients, the t-statistic, and other output
- Heteroskedasticity and multicollinearity
- Monte Carlo Methods
- Estimating correlation and volatility using EWMA and GARCH models
- Volatility term structures
- Quantifying volatility in VaR models

### Module 2 Foundations of Risk Management (18 hours)
- The role of risk management
- Basic risk types, measurement and management tools
- Creating value with risk management
- Modern Portfolio Theory (MPT)
- Standard and non-standard forms of the Capital Asset Pricing Model (CAPM)
- Single and multi-index models and the Arbitrage Pricing Theory (APT)
- Risk-adjusted performance measurement
- Enterprise Risk Management
- Financial disasters and risk management failures
- Case studies
- Ethics and the GARP Code of Condu

### Module 3 Financial Markets and Products (27 hours)
- Mechanics of OTC and exchange markets
- Forwards, futures, swaps and options
- Mechanics
- Pricing and factors that affect it
- Uses in hedging and hedging strategies
- Delivery options
- Interest rates and measures of interest rate sensitivity
- Derivatives on fixed-income securities, interest rates, foreign exchange, and equities
- Commodity derivatives
- Foreign exchange risk
- Corporate bonds

### Module 4 Valuation and Risk Models (27 hours)
- Value-at-Risk (VaR)
  - Applied to stock, currencies, and commodities
  - Applied to linear and non-linear derivatives
  - Applied to fixed income securities with embedded options
  - Structured Monte Carlo, stress testing, and scenario analysis
  - Extending VaR to operational risk
  - Limitations as a risk measure
  - Coherent risk measures
- Option valuation
  - Pricing options using binomial trees
  - The Black-Scholes-Merton Model
  - The "Greeks"
  - Fixed income valuation
    - Discount factors, spot rates, forward rates, and yield to maturity
    - Arbitrage and the Law of One Price
    - One factor measures of price sensitivity
    - Country and sovereign risk models and management
    - Fundamental analysis
    - Contingent claims approach
    - External and internal credit ratings
    - Expected and unexpected losses
    - Operational risk
    - Stress testing and scenario analysis

### Module 5 Market Risk Measurement and Management (18 hours)
- Fixed income securities
  - Duration, DV01, and convexity
  - Key rate exposures
  - Hedging and immunization
  - Risk neutral pricing
  - Mortgage-backed securities: structure and valuation
  - VaR and other risk measures
    - VaR mapping
  - Back testing VaR
  - Expected and unexpected losses
  - Exotic options

### Module 6 Credit Risk Measurement and Management (24 hours)
- Subprime mortgages and securitization
- Counterparty risk and OTC derivatives
- Credit risk concentration
- Credit derivatives
  - Types and uses
  - Mechanics and structure
  - Valuation
- Structured finance and securitization
  - The structuring and securitization process
  - Agency problems and moral hazard in the securitization process
  - Tranching, subordination, and support
- Default risk
  - Quantitative methodologies
  - Loss given default and recovery rates
  - Estimating defaults and recoveries from market prices and spreads
- The use of historical default rates and credit risk migration
- Expected and unexpected losses

### Module 7 Operational and Integrated Risk Management (24 hours)
- Calculating and applying risk-adjusted return on capital (RAROC)
- Estimating liquidity risk, sources of model risk
- Evaluating the performance of risk management systems
- Validating VaR models
- Enterprise risk management (ERM)
- Economic capital
- Operational loss data
  - Frequency and severity distributions
  - Modeling and fitting distributions
  - Data sufficiency
  - Extrapolating beyond the data
- Failure mechanisms of dealer banks
- Regulation and the Basel Accords
  - Minimum capital requirements
  - Methods for calculating credit, market, and operational risk
  - Liquidity risk management
  - Modeling risk aggregation
  - Stress testing
  - Revisions to the Basel II Accord
  - The Basel III framework

### Module 8 Risk Management and Investment Management (18 hours)
- Portfolio construction
- Portfolio-based performance analysis
- Tests of the Capital Asset Pricing Model (CAPM)
- Portfolio and component VaR
- Risk budgeting
- Risk monitoring and performance measurement
- Hedge funds
  - Hedge fund strategies
  - Due diligence and fraud detection
  - Liquidity
  - Risk management of hedge funds
  - Private equity

### Module 9 Current Financial Issues (18 hours)
- Subprime mortgages, securitization, and subprime CDOs
- Causes, consequences, and lessons learned from the current crisis
- Impact of financial development on risk
- Sovereign risk
  - Historical view of sovereign defaults
  - Interpreting sovereign spreads
  - The U.S. and Irish credit crisis
  - The Flash Crash
  - The Lehman collapse
  - Central counterparties
  - Sound compensation practices
Commencement Date
3 June 2011

Days and Times
Every Tuesday and Friday, 7:00pm-10:00pm

Duration
Approximately 10 months

Venue
SCOPE Admiralty Learning Centre, 8/F, United Centre, 95 Queensway, Hong Kong

Medium of Instruction
Cantonese, supplemented with English terminology. Programme materials are in English.

Assessment and Award
The assessment consists of a combination of coursework and examination. Students who have fulfilled all of the following criteria will be awarded a Continuing Education Diploma in Professional Financial Risk Management:

- have attempted all assessment components of each module; and
- have obtained at least 70% attendance in each module; and
- have obtained a minimum mark of 50% in 7 out of 9 modules; and
- have achieved an overall minimum mark of 50%

Entrance Requirements
1. Holders of a university degree, preferably in Finance, Accounting, Economics, Statistics, Mathematics, Computing or Engineering; or
2. Mature applicants of at least 23 years of age who have at least 2 years of relevant work experience.

Exemption
Students who have equivalent prior qualifications at a similar level can apply for module exemption. The criteria for exemption include course curriculum, assessment, teaching quality and quality assurance of the awarding institution. Recommendations will be made by the Programme Committee. An exemption is granted up to a maximum of 50% of the required modules.

Fee
HK$19,500 (Early bird discount: HK$18,500 for enrolment before 30 April 2011)

Financial Assistance
Continuing Education Fund (CEF)
This programme has been included in the list of reimbursable courses for CEF purposes. On successful completion of the programme, eligible applicants will be reimbursed 80% of the programme fee, subject to a maximum amount of HK$10,000. For more information, please visit the website www.sfaa.gov.hk/cef or call government’s 24-hour enquiry hotline at 3142 2277.

Education Loan
Successful applicants are eligible to apply for the Non-means Tested Loan Scheme (NLS) administered by the Hong Kong Government Student Financial Assistance Agency (SFAA). The maximum financial assistance under the NLS is equivalent to the total tuition fees payable for the programme. For more details or enquiries, please call 2150 6223 or visit the government’s website at www.info.gov.hk/sfaa.

Application Deadline
15 May 2011

Enquiries
School of Continuing and Professional Education, CityU
Location : LG/F, Academic Exchange Building,
City University of Hong Kong,
Tat Chee Avenue, Kowloon, Hong Kong
Tel : 3442 5388 / 3442 7423
Fax : 3442 0399
E-mail : team3@scope.edu
Website : www.cityu.edu.hk/ce/40020/

Information Seminar
Date : 28 April 2011 (Thursday)
Time : 7:30pm - 8:30pm
Venue : SCOPE Admiralty Learning Centre,
8/F, United Centre,
95 Queensway, Hong Kong
Online Seat Reservation : www.cityu.edu.hk/ce/seminars/40020
1. For each programme, please submit individually one application form and one cashier’s order/crossed cheque of programme fee payable to “City University of Hong Kong”. Write your name and the programme code at the back of the cashier’s order/cheque. Incomplete application forms or post-dated cheques will not be processed.

每份報名表只供報讀一個課程,並附上一張繳交該課程費用之銀行本票或劃線支票。申請人姓名及課程編號應寫於本票或支票背面。不完整的申請表或遞交期票，將不作處理。

2. Please send your duly completed application form, together with copies of education certificates and proof of work experience to School of Continuing and Professional Education (SCOPE), City University of Hong Kong, 83 Tat Chee Avenue, Kowloon.

請將詳細報名表格連同學歷及工作證明副本交回香港城市大學專業進修學院，收。

3. The programme will go through normal selection process. Admissions are subject to availability of places and selection criteria. Applicants meeting the minimum admission requirements are not guaranteed direct entry to the programme. Applicants may be invited for admission interviews if necessary.

本院將根據既定的收生程序進行甄選工作。取錄與否需視乎學額及甄選結果而定。申請人即使符合最低入學要求,也不一定取錄。如有需要,本院會邀請個別申請人進行入學面試。請申請時留意本院之通知。

4. Upon admission to the programme, applicants are required to provide original certificates and supporting documents for verification.

入學前,申請人需要提供學歷證明文件之正本以供核實。

5. SCOPE reserves the rights to alter programme details such as date, time, venue and instructor as well as to cancel programmes.

學院保留更改上課日期、時間、地點、導師及取消課程的權利。

6. Personal data provided on the application form will be used by SCOPE for the purpose relating to application and admission. For details of the personal data collection statement, please refer to the website: http://www.scope.edu.hk.


7. SCOPE will make special arrangements when Typhoon Signal No. 8 or above is hoisted, or when a Black Rainstorm Warning Signal is issued by the Hong Kong Observatory. Please visit SCOPE Website for details.

當天文台發出八號或以上熱帶氣旋警告信號或黑色暴雨警告信號,本院課程將作出特別安排。詳情請參閱本院網站。

8. Address: Lower Ground Floor, Academic Exchange Building, City University of Hong Kong, Tat Chee Avenue, Kowloon, Hong Kong. Phone: 3442 7423; Fax: 3442 7425; Email: scope@cityu.edu.hk; Website: http://www.scope.edu.hk

地址：香港九龍達之路香港城市大學學術交流大樓低層。電話: 3442 7423;傳真: 3442 7425;電郵: scope@cityu.edu.hk;網址: http://www.scope.edu.hk

9. Applications will be considered within one academic year only, except for unsuccessful enrolment or cancellation of a course.

學院保留最終取錄與否之權利。各課程之學額不可轉讓他人。所繳學費將不作退款或轉讓他人。

10. Personal particulars

申請人個人資料

Personal Particulars

Describe your professional qualifications and experience. Please list in reverse chronological order.

請詳細列出您所從事的專業資格及經驗 (按最近的為先)。
D. Work Experience
(Please list in reverse chronological order and attach copies of supporting documents.)

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<th>From</th>
<th>To</th>
<th>Name of Organization</th>
<th>Position</th>
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Occupation Code
01 Accounting
02 Administration & Management
03 Advertising
04 Banking & Financial Services

05 Computing & IT
06 Education
07 Engineering
08 Food and Beverage
09 Marketing & Sales
10 Public Relations
11 Social Services
12 Surveying
13 Transportation & Logistics
14 Tourism & Hotel
15 Government & Public Services
16 Others (Please specify)

Before submitting your application, please check if you have:

- provided copies of ALL transcripts and certificates / other relevant academic qualifications to support your application
- provided copies of proof of work experience
- completed the application form
- signed and dated the application form
- supplied other relevant information (if necessary)
- provided copies of ALL transcripts and certificates / other relevant academic qualifications to support your application

How do you know SCOPE / this programme? (You may choose more than one option.)

- SCOPE Website
- Programme Pamphlet
- School Prospectus
- Information Seminar
- Newspaper / Magazine Advertisement
- Referral by Friends / Relatives
- Referral by Teachers
- Referral by Collaborative Organizations
- Promotion
- Exhibition
- Others

Are you an eligible applicant for CEF?

Yes
No

Do you intend to apply for CEF?

Yes
No

Have you ever taken our programme?

Yes (Specify)
No

SCOPE would like to provide you information on our programmes / courses to help navigating your lifelong learning. If you do not wish to receive such information, please "x" the box.

Programme

For official use only

Name of Programme Leader
Signature
Date

Address Slips
D. Work Experience (Please list in reverse chronological order and attach copies of supporting documents.)

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<th>From Month / Year</th>
<th>To Month / Year</th>
<th>Name of Organization</th>
<th>Position</th>
<th>Occupation Code</th>
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Before submitting your application, please check if you have:

- provided copies of ALL transcripts and certificates / other relevant academic qualifications to support your application
- completed the application form
- signed and dated the application form
- supplied other relevant information (If necessary)

Please list in reverse chronological order and attach copies of supporting documents:

- Work Experience (Please list in reverse chronological order and provide work prove rnn)
  - From [ ] To [ ]
  - Occupation
  - Code

How do you know SCOPE / this programme? (You may choose more than one option.)

- SCOPE Website
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- School Prospectus
- Information Seminar
- Newspaper / Magazine Advertisement
- Referral by Friends / Relatives
- Information Brochure
- Others (Please specify)

Have you ever taken our programmes? Yes (Please specify) No

If yes, have you ever been approved by the government for any application for other CEF reimbursable courses? Yes No

Programme Particulars (Please “○” as appropriate or “ ”)

- Programme Fee
  - HK$19,500
  - HK$18,500
- Early bird discount for enrolment before 30 April 2011
- A. Programme Fee
  - Bank: [ ]
  - Branch: [ ]
  - Cheque No: [ ]
- B. Module Exemption
  - Module 1
  - Module 2
  - Module 3
  - Module 4
  - Module 5
  - Module 6
  - Module 7
  - Module 8

C. Continuing Education Fund (CEF)

- Are you an eligible applicant for CEF? Yes No
- Do you intend to apply for CEF? Yes No

Decleration

I declare that I have read and understood the nature and details of the Application Guide & Programme Information.

I declare that all the information given in support of this application form and the attached supporting documents are, to the best of my knowledge, accurate and complete, and agree to provide original documents (original copies) for verification of my qualifications when required. I understand that these information will be used in the admission decision process, I accept that if, in reading and completing this application, I knowingly or carelessly provided untrue or incomplete information, any offer of admission, whether accepted or not, may be disqualified and / or I may be required to withdraw from any programme which I have enrolled in and all fees paid will not be refunded.

I authorize SCOPE to obtain, and the relevant authorities to release, any and all information about my academic and / or professional qualifications obtained in Hong Kong and elsewhere.

I authorize SCOPE to use my data to carry out checks regarding my application and records of previous studies in the University and other institutions.

I declare that I have read and understood the nature and details of the Application Guide & Programme Information.

I understand that, upon my registration in a programme, the data will become part of my student record and may be used for all purposes relating to my study in the programme.

I consent that if being admitted to the programme, I will conform to the statutes and regulations of City University of Hong Kong and SCOPE.

Addressee Slips

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For official use only

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<tr>
<th>Programme</th>
<th>Interview</th>
<th>Admitted</th>
<th>Rejected</th>
<th>Waiting List</th>
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</table>

Name of Programme Leader

Signature Date
Application Guide

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3. The programme will go through normal selection process. Admissions are subject to availability of places and selection criteria. Applicants meeting the minimum admission requirements are not guaranteed direct entry to the programme. Applicants may be invited for admission interviews if necessary.

4. Upon admission to the programme, applicants are required to provide originals of certificates and supporting documents for verification.

5. SCOPE reserves the rights to alter programme details such as date, time, venue and instructor as well as to cancel programmes.

6. SCOPE reserves the rights to cancel an applicant. Places allocated in each class are not transferable. Fees are not refundable or transferable, except for unsuccessful enrolment or cancellation of a course.

7. Personal Data Collection Statement, please refer to the website: http://www.cityu.edu.hk/ce/pdcs

8. Personal Qualifications

A. Academic Qualifications

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<tr>
<th>Awarding Institution</th>
<th>Title of Award</th>
<th>Full-time/Part time</th>
<th>Year of Award</th>
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B. Professional Qualifications

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<tr>
<th>Awarding Institution</th>
<th>Professional Qualifications</th>
<th>Year of Attainment</th>
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C. Highest Education Level Attained

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<tr>
<th>Education Level</th>
<th>(Please list in reverse chronological order and attach copies of supporting documents.)</th>
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* 中、英文内容如有出入，以英文为准