Advanced Knowledge
Practical Skills
Professional Views

Master of Statistics

Apply now for entry in September 2016

FACULTY OF SCIENCE

THE UNIVERSITY OF HONG KONG
The degree of Master of Statistics is a one-year full-time / two-year part-time programme, which has been restructured from the previous degree of Master of Social Sciences in Applied Statistics that was launched in September 1987. Since the first graduation in 1989, we expect to have about 750 graduates when the present cohort completes the programme.

This programme is designed to provide a rigorous training in the principles and the practice of statistics. It emphasizes in applications and aims to prepare candidates for further study, research, consulting work and administration in various fields through computer-aided and hands-on experience.

**Highlights**
- Be a knowledgeable statistician in principles and practice
- Experience hands-on applications of methodologies with powerful commercial software
- Could select up to ten electives from the Department's research postgraduate courses
- Join the programme of over 25 years in curriculum development and delivery
- Select a theme of your interest (Risk Management theme / Data Analytics theme)

**Programme Learning Outcomes**
1. To acquire advanced knowledge in statistics and practical skills of applying appropriate statistical methods, models and techniques, and acquire new insights and knowledge through life-long learning
2. To equip with hands-on experience in statistical and risk analyses using commercial statistical software and be competent for data-analytic jobs which require advanced computational skills
3. To gain confidence in providing professional views and to make informed decisions on complex real-life problems encountered in the data explosion era
4. To communicate effectively with the layman on statistical issues
5. To appraise the professional ethical issues

**Master of Statistics Outstanding Performance Scholarship**
One scholarship of HK$50,000 shall be awarded annually to a MStat student on the basis of academic merit and quality of coursework.

**Lifelong Learning Prizes in Statistics**
There are Lifelong Learning Prizes in Statistics, each from $5,000 to $10,000, for students in this programme based on their first-year examination results.

**Reimbursable Courses by Continuing Education Fund (CEF)**
Five courses in the programme:
- STAT7006 Design and analysis of sample surveys
- STAT8007 Statistical methods in economics and finance
- STAT8014 Risk management and Basel accords
- STAT8015 Actuarial statistics
- STAT8017 Data mining techniques
are reimbursable courses for the purposes of CEF. All CEF applicants are required to attend at least 70% of the courses before they are eligible for fee reimbursement under the CEF.

# Subject to approval

“I keep saying that the sexy job in the next 10 years will be statisticians.”

“...it(Big Data R&D Initiative) will develop and evaluate new algorithms, statistical methods, technologies, and tools for improved data collection and management, data analytics, and e-science collaboration environments.”
Extracted from Big Data solicitation released by NSF of the US.
Programme Curriculum

Commencing in September, the curriculum is composed of a total of 60 credits of courses in either one year for full-time study, or two years for part-time study. The programme offers great flexibilities for students who wish to take a general approach or a specialised theme in Risk Management or Data Analytics. A student may choose to have his/her theme printed on the transcript if he/she has satisfied the requirement of one of the themes. If a student selects an MStat course whose contents are similar to a course (or courses) which he/she has taken in his/her previous study, the Department may not approve the selection in question.

**Curriculum for Full-time study**

**Two compulsory courses (12 credits)**
- STAT6008 Advanced statistical inference
- STAT6014 Advanced statistical modelling

**Students with prior background may replace each course with a more advanced course from the same area:**
- REPLACE…
  - STAT6008 Advanced statistical inference
  - STAT6014 Advanced statistical modelling
- WITH
  - STAT6009 Research methods in statistics
  - Any other course
  - STAT7005 Multivariate methods
  - STAT6014 Advanced statistical modelling

**plus at least 24 credits of courses from one of the themes below:**

### Risk Management theme
at least 24 credits from
- STAT6006 Stochastic calculus with financial applications (6 credits)
- STAT6013 Financial data analysis (6 credits)
- STAT6015 Advanced quantitative risk management and finance (6 credits)
- STAT6017 Operational risk and insurance analytics (6 credits)
- STAT8003 Time series forecasting (6 credits)
- STAT8007 Statistical methods in economics and finance (6 credits)
- STAT8014 Risk management and Basel accords (6 credits)
- STAT8015 Actuarial statistics (6 credits)
- STAT8017 Data mining techniques (6 credits)
- STAT8301 Big data analytics (3 credits)
- STAT8303 Quantitative strategies and algorithmic trading (3 credits)

*The remaining courses can be selected from other MStat courses*

### Data Analytics theme
at least 24 credits from
- STAT6011 Computational statistics (6 credits)
- STAT6014 Advanced statistical modelling (for part-time study only) (6 credits)
- STAT6016 Spatial data analysis (6 credits)
- STAT7005 Multivariate methods (6 credits)
- STAT7007 Categorical data analysis (6 credits)
- STAT7008 Programming for data science (6 credits)
- STAT8003 Time series forecasting (6 credits)
- STAT8016 Biostatistics (6 credits)
- STAT8017 Data mining techniques (6 credits)
- STAT8019 Marketing analytics (6 credits)
- STAT8301 Big data analytics (3 credits)
- STAT8302 Structural equation modelling (3 credits)

*The remaining courses can be selected from other MStat courses*

### Capstone requirement (6 credits)
6 credits from
- STAT8002 Project (6 credits)
- STAT8088 Practicum (6 credits)
- STAT8089 Capstone project (6 credits)

Apart from the two compulsory courses and capstone requirement, candidates may choose not to follow any theme and may take 42 credits of elective courses in any order, whenever feasible.
Description of Courses

STAT6006  Stochastic calculus with financial applications (6 credits)
This course is an advanced course on the option pricing theory. The course covers Black-Scholes equation and stochastic calculus, and interest models. Contents include: Brownian motion, introduction to stochastic calculus, arithmetic and geometric Brownian motion, Ito formula, Sharpe ratio and risk premium, Black-Scholes equation, risk-neutral stock-price process and option pricing, option's elasticity and volatility, Vasicek, Cox-Ingersoll-Ross, and Black-Derman-Toy models, delta-hedging for bonds and the Sharpe-ratio equality constraint, Black's model, options on zero-coupon bonds; interest-rate caps and caplets.
Assessment: One 3-hour written examination; 25% coursework and 75% examination

STAT6008  Advanced statistical inference (6 credits)
This course covers the advanced theory of point estimation, interval estimation and hypothesis testing. Using a mathematically-oriented approach, the course provides a formal treatment of inferential problems, statistical methodologies and their underlying theory. It is suitable in particular for students intending to further their studies or to develop a career in statistical research. Contents include: (1) Decision theory: loss function; risk; decision rule; admissibility; minimaxity; unbiasedness, Bayes' rule; (2) Bayesian methods: prior and posterior distributions, Bayesian inference; (3) Estimation theory: exponential families; likelihood; sufficiency; minimal sufficiency; completeness; UMV estimators; information inequality; large-sample theory of maximum likelihood estimation; (4) Hypothesis testing: uniformly most powerful (UMP) test; monotone likelihood ratio; unbiasedness; UMP unbiased test; conditional test; large-sample theory of likelihood ratio, confidence set; (5) Nonparametric inference: randomization methods; permutation methods; bootstrap methods.
Assessment: One 2-hour written examination; 25% coursework and 75% examination

STAT6009  Research methods in statistics (6 credits)
This course introduces some statistical concepts and methods which potential graduate students will find useful in preparing for work on a research degree in statistics. Focus is on applications of state-of-the-art statistical techniques and their underlying theory. Contents may be selected from: (1) Basic asymptotic methods: modes of convergence; stochastic orders; laws of large numbers; central limit theorems; delta method; Edgeworth expansions; saddlepoint approximations; (2) Parametric and nonparametric likelihood methods: high-order approximations; profile likelihood and its variants; signed likelihood ratio statistics; empirical likelihood; (3) Nonparametric statistical inference: sign and rank tests; Kolmogorov-Smirnov test; nonparametric regression; density estimation; kernel methods; (4) Computationally-intensive methods: cross-validation; bootstrap; permutation methods; (5) Robust methods: measures of robustness; M-estimator; L-estimator; R-estimator; estimation functions; (6) Sequential analysis: sequential probability ratio test; sequential estimation; (7) Model selection using information criteria; (8) Other topics as determined by the instructor.
Assessment: One 2-hour written examination; 25% coursework and 75% examination

STAT6010  Advanced probability (6 credits)
This course provides an introduction to measure theory and probability. The course will focus on some basic concepts in theoretical probability which are important for students to do research in actuarial science, probability and statistics. Contents include: sigma-algebra, measurable space, measure and probability, measure space and probability space, measurable functions, random variables, integration theory, characteristic functions, convergence of random variables, Hilbert spaces, conditional expectations, martingales.
Assessment: One 2-hour written examination; 50% coursework and 50% examination

STAT6011  Computational statistics (6 credits)
This course aims to give postgraduate students in statistics a background in modern computationally-intensive methods in statistics. It emphasizes the role of computation as a fundamental tool of discovery in data analysis, statistical inference, and for development of statistical theory and methods. Contents include: Generation of random variables including the inversion method, the grid method, the sampling/importance resampling method, the stochastic representation method, and the conditional sampling method; Optimization techniques including Newton's method, expectation-maximization (EM) algorithm and its variants, and minorization-maximization (MM) algorithms; Integration including Laplace approximations, Riemannian simulation, the importance-sampling method and variance reduction techniques; Markov chain Monte Carlo methods including data augmentation algorithm, Gibbs sampler, and the exact inverse Bayes formulae sampling; Bootstrap methods.
Assessment: One 2-hour written examination; 50% coursework and 50% examination

STAT6013  Financial data analysis (6 credits)
This course aims at introducing statistical methodologies in analyzing financial data. Financial applications and statistical methodologies are intertwined in all lectures. Contents include: recent advances in modern portfolio theory, market microstructure and high frequency data analysis.
Assessment: One 2-hour written examination; 40% coursework and 60% examination

STAT6014  Advanced statistical modelling (6 credits)
This course introduces modern methods for constructing and evaluating statistical models and their implementation using popular computing software, such as SAS or R. It will cover both the underlying principles of each modelling approach and the statistical properties of the model estimation procedures. Topics from: (i) Generalized linear models; (ii) Random effects and mixture models; (iii) Nonparametric and semi-parametric methods; (iv) Model selection methods: kernel and local polynomial regression; selection of smoothing parameters; (v) Additive models; semi-parametric mixed models; generalized additive models; (vi) General issues of model selection: AC, BIC and Cross-validation.
Assessment: One 2-hour written examination; 50% coursework and 50% examination

STAT6015  Advanced quantitative risk management and finance (6 credits)
This course covers statistical methods and models of importance to risk management and finance and links Finance theory to market practice via statistical modelling and decision making. Emphasis will be put on empirical analyses to address the discrepancy between finance theory and market data. Contents include: Basic Monte Carlo and Quasi-Monte Carlo Methods; Variance Reduction Techniques; Simulating the value of options and the value-at-risk for risk management; Review of univariate volatility models; multivariate volatility models; Value-at-risk and expected shortfall; estimation, back-testing and stress testing; Copula; Extreme value theory for risk management.
Assessment: One 2-hour written examination; 25% coursework and 75% examination

STAT6016  Spatial data analysis (6 credits)
This course covers statistical concepts and tools involved in modelling data which are correlated in space. Applications can be found in many fields including epidemiology and public health, environmental sciences and ecology, economics and others. Covered topics include: (1) Outline of three types of spatial data: point-level (geostatistical), areal (lattice) and spatial point process. (2) Model-based geostatistics: covariance functions and the variogram; spatial trends and directional effects, intrinsic models; estimation by curve fitting or by maximum likelihood; spatial prediction by least squares, by simple and ordinary kriging, by trans-Gaussian kriging. (3) Areal data models: introduction to Markov random fields; conditional, intrinsic, and simultaneous autoregressive (CAR, IAR, and SAR) models. (4) Hierarchical modelling for univariate spatial response data, including Bayesian kriging and lattice modelling. (5) Introduction to simple spatial point processes and spatio-temporal models. Real data analysis examples will be provided with dedicated R packages such as gstat.
Assessment: One 2-hour written examination; 50% coursework and 50% examination
This course aims to provide the foundation of operational risk management and insurance. Special emphasis will be put on the analytical and modeling techniques for operational risk and insurance. Contents include fundamentals of operational risk and Basel regulation, loss distribution, estimation of risk models, copula and modeling dependence, insurance and risk transfer for operational risk.

**Assessment:** One 2-hour written examination; 25% coursework and 75% examination

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**STAT7003 Foundations of statistics (6 credits)**

Motivated by real problems involving uncertainty and variability, this course introduces the basic concepts and principles of statistical inference and decision-making. Ideas developed will include probability modelling, statistical decision theory, principles; the likelihood principle; maximum likelihood estimation; likelihood ratio tests; hypotheses testing. (Only under exceptional academic circumstances can this compulsory course be replaced by an elective course.)

**Assessment:** One 3-hour written examination; 25% coursework and 75% examination

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**STAT7004 Linear modelling (6 credits)**

Much of the analysis of variability is concerned with locating the sources of the variability, and many current statistical techniques investigate these sources through the use of linear models. This course presents a unified theory of such statistical problems including regression; variance and covariance analyses; design of experiments; and their practical implementation with statistical packages. (Only under exceptional academic circumstances can this compulsory course be replaced by an elective course.)

**Assessment:** One 3-hour written examination; 25% coursework and 75% examination

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**STAT7005 Multivariate methods (6 credits)**

In many disciplines the basic data on an experimental unit consist of a vector of possibly correlated measurements. Examples include the chemical composition of a rock; the results of clinical observations and tests on a patient; the household expenditures on different commodities. Through the challenge of problems in a number of fields of application, this course considers appropriate statistical models for explaining the patterns of variability of such multivariate data. Topics include: multiple, partial and canonical correlation; multivariate regression; tests on means for one-sample and two-sample problems; profile-analysis; test for covariances structure; multivariate ANOVA, principal components analysis; factor analysis; discriminant analysis and classification.

**Assessment:** One 3-hour written examination; 40% coursework and 60% examination

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**STAT7006 Design and analysis of sample surveys (6 credits)**

(CEF code 21202633-A)

Inferring the characteristics of a population from those observed in a sample or sample from that population in a situation often arises for economic, ethical or technological reasons. Against the background of practical situations, this course considers the basic principles, practice and design of sampling techniques to produce objective answers free from bias. Emphasis will be on current and local problems.

**Assessment:** One 3-hour written examination; 25% coursework and 75% examination

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**STAT7007 Categorical data analysis (6 credits)**

Many social and medical studies, especially those involving questionnaires, contain large amounts of categorical data. Examples of categorical data include presence or absence of disease (yes / no), mode of transportation (bus, taxi, railway), attitude toward an issue (strongly disagree, disagree, agree, strongly agree). This course focuses on analyzing categorical data with emphasis on hands-on training of analyzing real data using statistical software such as SAS. Consulting experience may be presented in the form of case studies. Topics include: classical treatments of 2 and 3-way contingency tables, measures of association and nonparametric methods; generalized linear models; logistic regression for binary, multinomial and ordinal data, loglinear models, Poisson regression; Modelling repeated measurements; generalized estimating equations.

**Assessment:** One 3-hour written examination; 50% coursework and 50% examination

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**STAT7008 Programming for data science (6 credits)**

In the big data era, it is very easy to collect huge amounts of data. Capturing and exploiting the important information contained within such datasets poses several challenges. This course provides students with a strong foundation in computing skills necessary to use R or Python to tackle some of these challenges. Possible topics to be covered may include exploratory data analysis and visualization, collecting data from a variety of sources (e.g. excel, web-scraping, API and others), object-oriented programming concepts and scientific computation tools. Students will learn to create their own R packages or Python libraries.

**Assessment:** 100% coursework

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**STAT7017 Operational risk and insurance analytics (6 credits)**

Huge volumes of socio-economic statistics are compiled and published on society and the economy by Governments and other bodies locally and elsewhere. Strong ability of business managers and authorities concerned to make effective reference to relevant data greatly enhances the quality of decision making in business and public policy processes. Students will learn about globally adopted standards for the compilation and dissemination of important data, such as those on population, labour, economic structure (in particular GDP, productivity, prices, trade, finance, housing, health and education, how to obtain them; and appropriate methods of utilizing them for the purposes of understanding socio-economic phenomena and making sound decisions. Ample practical examples drawn from Hong Kong and elsewhere will be presented.

**Assessment:** One 1.5-hour written examination; 40% coursework and 60% examination

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**STAT8000 Workshop on spreadsheet modelling and database management (5 credits)**

This course aims to enhance students’ IT knowledge and skills which are essential for career development of statistical and risk analysts. The course contains a series of computer hands-on workshops on Excel VBA programming, MS-Access and SQL and C++ basics.

**Assessment:** 100% coursework, assessment of this course is on a Pass or Fail or Distinction basis

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**STAT8002 Project (6 credits)**

A project in any branch of statistics or probability will be chosen, under the supervision of individual staff member. A substantial written report is required. Availability of this course is subject to approval.

**Assessment:** 75% written report and 25% oral presentation

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**STAT8003 Time series forecasting (6 credits)**

A time series consists of a set of observations on a random variable taken over time. Such series arise naturally in climatology, economics, finance, environmental research and many other disciplines. In addition to statistical modelling, the course deals with the prediction of future behaviour of these time series. This course distinguishes different types of time series, investigates various representations for them and studies the relative merits of different forecasting procedures.

**Assessment:** One 3-hour written examination; 40% coursework and 60% examination

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**STAT8007 Statistical methods in economics and finance (6 credits)**

(CEF code 232080313)

This course provides a comprehensive introduction to state-of-the-art statistical techniques in economics and finance, with emphasis on their applications to time series and panel data sets in economics and finance. Topics include: regression with autocorrelated errors, modelling returns and volatility; instrumental variables and two stage least squares; panel time series models; unit root tests; co-integration, error correction models.

**Assessment:** One 3-hour written examination; 25% coursework and 75% examination

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**STAT8014 Risk management and Basel accords (6 credits)**

(CEF code: 23202504-5)

Being an important financial centre, Hong Kong has always been on the alert for risk in the banking and financial industry. We have weathered many attacks and crises over the past decades. Following the deep and long lasting global financial crisis started in 2007/08, this risk has been the primary focus of most people. This course will provide, and it is paramount for people in or related to the industry to be fully aware of the relevant risk management, including the nature, the culture, the framework, the cycle, the measurement (with focus on market, credit and operational risks) and the mitigation techniques, along with the knowledge of the Basel Accords and practical critical issues.

**Assessment:** One 3-hour written examination; 40% coursework and 60% examination

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**STAT8015 Actuarial statistics (6 credits)**

(CEF code: 23202505-3)

The main focus of this module will be on financial mathematics of compound interest with an introduction to life contingencies and statistical theory of risk. Topics include simple and compound interest, annuities certain, yield rates, survival models and life tables, population studies, life annuities, assurances and premiums, reserves, joint life and last survivor statuses, multiple decrement tables, expenses, individual and collective risk theory.

**Assessment:** One 3-hour written examination; 25% coursework and 75% examination
Programme Duration and Class Schedules

The programme extends over not less than one academic year for the full-time study, and not less than two academic years for the part-time study. Teaching will take place mostly in day-time from Monday to Saturday for courses having course codes STATXXX, and on weekday evenings (7.00 – 10.00 p.m.), and Saturday mornings (9:30 a.m. – 12:30 p.m.) and afternoons (2:00 – 5:00 p.m.) for courses having course codes STAT7XX or STAT8XX. All lectures are conducted in English at HKU.

Optional Summer Courses

- A 12-hour preparatory course in matrices and calculus for part-time students who need to rejuvenate their skills (August, 2016).
- A 6-hour tutorial in SPSS for all the students who need to rejuvenate their skills in data management using SPSS (August, 2016).
- A 6-hour tutorial in SAS for all the students who need to rejuvenate their skills in data management using SAS (August, 2016).
- A 6-hour introductory course to the use of the language R for data analysis and graphics. This beginners’ course covers data handling, graphics, mathematical functions and some basic statistical techniques (August, 2016).
Target Students

The programme is for individuals who wish to acquire the knowledge, practical skills and professional views in statistics. Although most students come from a wide range of disciplines, those who have no former training in statistics should have considerable working experience.

Students Testimonial

We are in an age of big data where a solid foundation and true understanding of statistics are essential. Although I have already studied some statistics during my undergraduate study, the MStat program in HKU gave me a chance to explore deeper. With the help of a wide range of courses available and a powerful Faculty, I was able to major in the field I am really interested in and have a glimpse of the whole picture of statistics at the same time. Besides, in the program, I was often required to use the software R or SAS to solve problems which forced me to become skilful in programming with these two languages. Thanks to this, I am taking great advantages over other candidates in competing for a top job.

The MStat program in HKU is always seeking an optimal balance of theory and application in talent development. You shouldn’t miss it if you are pursuing your future in fields related to statistics.

CHEN Haoyun [MStat Full-time Graduate 2015]  
Actuarial Officer, Ping An Property & Casualty Insurance Company of China Ltd.

In the era of big data, statistics is one of the most important areas in data analytics. It is an art of decision making from the data. In the past year, the MStat program provided me with exposure to advanced statistical theories, a wide range of data types and statistical models. I was so attracted to some interesting topics of statistics such as spatial data analysis, data mining as well as big data analytics. The well-designed program also equipped me with practical data management and programming skills which are very useful. I cherish the challenging process of analyzing real world data in various projects and I appreciate the great support from the professional teaching staff, the resources and training provided. The skills, knowledge and hands-on experience I acquired from the program benefit my work in which I have to conduct survey planning and estimations. If you would like to have a deeper and more comprehensive understanding in statistics, do not hesitate to enroll in the MStat program!

CHEUNG Wing Chung Vinci [MStat Full-time Graduate 2015]  
Research Manager, HK SAR Census and Statistics Department

The MStat programme gave me great experience in further enhancing my Statistics knowledge after my undergraduate study. The programme successfully combines Statistics concepts with real-life applications, which gave me chances to apply what I learned in lectures to real business situations through various assignments and projects. The technical skills I learned is useful for me to carry out portfolio analysis as well as quantitative analysis on credit risk area. I would strongly recommend those who are interested to enroll in the programme and enjoy the great time!

WONG Man Kee Tracy [MStat Part-time Graduate 2015]  
Assistant Manager, Risk M&S & Infrastructure, China CITIC Bank International Limited

As we have entered into the information age, the need for extracting valuable information from a huge amount of data is tremendous and statistics provides us an extremely powerful tool to analyze the ever-growing data. This Full-time MStat program provides me a golden opportunity to learn advanced theory and methodology of statistics and command essential data analytical skills. In addition, the well-designed courses help me see the amazing combination of financial data and statistical techniques, through which I have gained in-depth understanding of the financial market and risk management. Through this program, I have developed the professional advantages as a statistics student, which lies in the profound comprehension of data in the scientific selection of statistics models, in the rational explanation of results and the ability to transform them into luminous conclusions. This is an intensive year, but also an interesting year and productive year.

ZHANG Chi [MStat Full-time Graduate 2013]  
PhD Student, Department of Statistics and Actuarial Science, HKU

I have spent most of my professional carrier in Finance. After 2 years in quantitative research, and over 15 years spent in derivatives trading, I am now in charge of risk management at Samena Capital, a principal investment group. I have built significant practical financial market experience, but quantitative risk management as a discipline has seen tremendous developments in the past ten years, in part because of the exponential growth in market data availability and progress in computer science/quantitative analysis of large sets of data. To complement and strengthen my technical skill-set, I decided to enroll into HKU master of statistics program. This experience has been way beyond my expectations in terms of relevance to my work as well as personal interest. The program has provided me with a clear theoretical background on recent academic work, as well as a useful update on data analysis software with a number of practice oriented works. We have now implemented a number of these tools and techniques in our daily routine work. It is fair to say that this adds significant value to our investment process. I very warmly recommend HKU MStat program to financial market practitioners who want to acquire a sound and practical update in quantitative finance.

Jean-Paul BRASIER [MStat Part-time Graduate 2012]  
Senior Vice President, Samena Capital

Examples of backgrounds of admitted students in recent years:

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<tr>
<th>HKSAR Government departments/units:</th>
<th>Hospital Authority/Private clinics:</th>
<th>Public companies:</th>
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<tr>
<td>Statistician</td>
<td>Associate Consultant</td>
<td>Corporate Actuary</td>
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<td>Statistical Assistant</td>
<td>Statistician</td>
<td>Actuarial Analyst</td>
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<td>Research Officer</td>
<td>Senior Medical Officer</td>
<td>Private companies:</td>
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<td>Research Manager</td>
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<td>Education profession:</td>
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<td>Senior Consultant</td>
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<td>Panel Head</td>
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<td>Graduate Master</td>
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<td>Teacher</td>
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<td>Research Officer</td>
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<td>Senior Data Science Analyst</td>
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<td>Research Assistant</td>
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<td>Consultant, Data Analytics</td>
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<td>Assistant Computer Officer</td>
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<td>Banking and finance profession:</td>
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<td>Quality Assurance Officer</td>
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<td>Head of Asset Management</td>
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<td>Senior Marketing Executive</td>
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<td>Equity Data Analyst</td>
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<td>Marketing Executive</td>
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<td>Quantitative Trader</td>
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<td>Money Market Dealer</td>
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<td>Derivative Trader</td>
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<td>System Analyst/Programmes</td>
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<td>Senior Investment Manager</td>
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<td>Portfolio Manager</td>
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<td>Risk Management Analyst</td>
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<td>Credit Risk Officer</td>
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<td>Policy &amp; Acquisition</td>
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<td>Risk Manager</td>
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<td>Associate (Risk Management)</td>
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Examples of fields of work:  
- Banking and Finance
- Investment Management
- Risk Management
- Data Science
- IT
- Actuarial Science
- Research
- Business Development
- Consulting
- Quality Assurance
- Corporate
- Actuarial
- Financial Analysis
- Economics
- Advertising
- Marketing
- Business Intelligence
- Data Analytics
- Consulting
Tuition Fees
The composition fee for the full-time programme is HK$138,000 for the 2016 intake and that for the part-time programme is HK$69,000 per year for two years. The fee shall be payable in two instalments over one year for full-time study or in four instalments over two years for part-time study. In addition, students are required to pay Caution Money (HK$350), refundable on graduation subject to no claims being made, and Graduation Fee (HK$350).

The University allows Occasional Students to enroll in individual courses without registering in any particular programme of study. Tuition fee for an Occasional Student is HK$2,300 per credit in the academic year 2016-17.

Requirements
A Bachelor's degree with Honours, or equivalent qualification, with knowledge of matrices and calculus. Full-time applicants should have knowledge of introductory statistics and linear modelling.

Application
Online application can be accessed via http://www.als.hku.hk/admission/tpg/

Application Deadline
Main Round: December 15, 2015
Clearing Round: January 31, 2016

Programme Director
Dr Philip LH Yu
BSc, PhD HK
Department of Statistics & Actuarial Science

Enquiries
Ms Esther Cheung
Department of Statistics & Actuarial Science
Tel: 3917 2467 Email: mstat@saas.hku.hk

Support for International Students
http://cedars.hku.hk/
Useful information for students:
http://cedars.hku.hk/publication.php