Master of Statistics

Apply now for entry in September 2020

- Big data analytics
- Data mining
- Social Network
- Spatial data analysis
- Risk management & Basel accords
- Algorithmic trading
- Marketing analytics

Advanced Knowledge

Practical Skills

Professional Views
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 1,000 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.

**Programme Highlights**
- Ranked No.34 worldwide overall
- Produces knowledgeable statistician in principles and practice
- Experience hands-on applications of methodologies with powerful statistical software
- Could select up to seven electives from the Department's postgraduate courses
- Join the programme of more than 30 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 develop new knowledge and skills 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 make informed decisions on complex real-life problems encountered in the data explosion era
4. To communicate effectively and with the layman on statistical issues
5. To critically evaluate and to make proper use of models and techniques for data analyses and risk management, and to appraise the related ethical issues
6. To prepare to be confident statisticians for providing professional view on statistical issues.

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

**Lifelong Learning Prizes in Statistics**
There are the Lifelong Learning Prizes in Statistics, each from $5,000 to $10,000, awarded to students on the basis of academic achievement.

**Reimbursable Course(s) by Continuing Education Fund (CEF)**
Six courses in the programme:
- STAT7006 Design and analysis of sample surveys
- STAT8007 Statistical methods in economics and finance
- STAT8015 Risk management and Basel Accords
- STAT8019 Marketing Analytics
- STAT8017 Data mining techniques
- STAT8019 Structural equation modelling

All CEF applicants are required to attend at least 70% of the courses before they are eligible for fee reimbursement under the CEF.

**Other elective courses (18 credits)**
- STAT6050 Research methods in statistics (6 credits)
- STAT6010 Advanced probability (6 credits)
- STAT7006 Design and analysis of sample surveys (6 credits)
- STAT7017 Socio-economic statistics for business and public policies (6 credits)
- STAT8000 Workshop on spreadsheet modelling and database management (6 credits)
- STAT8001 Career development and communication workshop (Non-credit-bearing)
- STAT8004 Current topics in statistics (6 credits)
- Any other course

**Performance Scholarship**
A scholarship of HK$50,000 shall be awarded annually to students on the basis of academic merit and quality of coursework.

**Lifelong Learning Prizes in Statistics**
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**Capstone requirement (6 credits)**
- STAT8019 Marketing analytics (6 credits)
- STAT8015 Actuarial statistics (6 credits)
- STAT8017 Data mining techniques (6 credits)
- STAT8021 Big data analytics (6 credits)
- STAT7102 Advanced statistical modelling (6 credits)
- STAT7101 Fundamentals of statistical inference (6 credits)

Apart from the two compulsory courses and capstone requirement, candidates may choose not to follow any theme and may take 24 credits of elective courses in any order, whenever feasible.

**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 flexibility 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 he/she has taken in his/her previous study, the Department may not approve the selection in question. Students must obtain a cumulative GPA of at least 2.0 to graduate.

**Curriculum study applicable for both full-time and part-time modes**

<table>
<thead>
<tr>
<th>Programme</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Two compulsory courses (12 credits)</td>
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<tr>
<td>STAT7101 Fundamentals of statistical inference (6 credits)</td>
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<td>STAT7102 Advanced statistical modelling (6 credits)</td>
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<td>Students with prior background has to take a more advanced course from the same area as replacement:</td>
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<tr>
<td>REPLACE...</td>
<td>WITH...</td>
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</table>
| STAT7101 Fundamentals of statistical inference (6 credits) | STAT6002 Research methods in statistics (6 credits)
| STAT7102 Advanced statistical modelling (6 credits) | STAT7005 Multivariate methods (6 credits)
| Any other course | |
| **Theme-specific elective courses (24 Credits)** | |
| **Risk Management theme** | **Data Analytics theme** |
| plus 24 credits from | plus 24 credits from |
| STAT6015 Financial data analysis (6 credits) | STAT6011 Computational statistics (6 credits)
| STAT6015 Advanced quantitative risk management and finance (6 credits) | STAT6016 Spatial data analysis (6 credits)
| STAT7002 Actuarial risk and insurance analytics (6 credits) | STAT7005 Multivariate methods (6 credits)
| STAT8003 Time series forecasting (6 credits) | STAT7007 Categorical data analysis (6 credits)
| STAT8007 Statistical methods in economics and finance (6 credits) | STAT7008 Programming for data science (6 credits)
| STAT8014 Risk management and Basel Accords (6 credits) | STAT8013 Time series forecasting (6 credits)
| STAT8015 Actuarial statistics (6 credits) | STAT8016 Biostatistics (6 credits)
| STAT8017 Data mining techniques (6 credits) | STAT8017 Data mining techniques (6 credits)
| STAT8019 Marketing analytics (6 credits) | STAT8019 Marketing analytics (6 credits)
| STAT8021 Big data analytics (6 credits) | STAT8021 Big data analytics (6 credits)
| **Any other course** | **Structural equation modelling (6 credits)** |
| **Other elective courses (18 credits)** | **Bayesian statistics (3 credits)** |
| plus at least 18 credits from | **Statistical methods for network data (3 credits)** |
| STAT6009 Research methods in statistics (6 credits) | **Statistical methods for network data (3 credits)** |
| STAT6010 Advanced probability (6 credits) | **Statistical methods for network data (3 credits)** |
| STAT7006 Design and analysis of sample surveys (6 credits) | **Statistical methods for network data (3 credits)** |
| STAT7017 Socio-economic statistics for business and public policies (6 credits) | **Statistical methods for network data (3 credits)** |
| STAT8000 Workshop on spreadsheet modelling and database management (6 credits) | **Statistical methods for network data (3 credits)** |
| STAT8001 Career development and communication workshop (Non-credit-bearing) | **Statistical methods for network data (3 credits)** |
| STAT8004 Current topics in statistics (6 credits) | **Any theme-specific elective courses** |
| Any theme-specific elective courses | **Any capstone courses** |

“Working with numbers is in great demand in the years to come, evidenced in the impressive growth outlook numbers that help bolster the rankings of jobs like Data Scientist and Statistician.”


“Integration of statistical inference principles as part of Big Data will be essential to resolve these (big data) challenges.”

Extracted from the Federal Big Data Research and Development Strategic Plan by the Executive Office of the President of the USA.
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 1,000 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.

### Programme Learning Outcomes

1. To acquire advanced knowledge in statistics and practical skills of applying appropriate statistical methods, models and techniques, and develop new knowledge and skills through life-long learning.
2. To equip with hands-on experience in statistical and risk analyses and develop new knowledge and skills through life-long learning.
3. To make informed decisions on complex real-life problems and appraise the related ethical issues.
4. To join the programme of more than 30 years in curriculum development and delivery.
5. To select a theme of your interest (Risk Management theme / Data Analytics theme) and develop new knowledge and skills through life-long learning.
6. To acquire advanced knowledge in statistics and practical skills of applying appropriate statistical methods, models and techniques, and develop new knowledge and skills through life-long learning.

### Programme Highlights

- Ranked No 34 worldwide overall
- Ranked a knowledgeable statistician in principles and practice
- Experience hands-on applications of methodologies with powerful statistical software
- Could select up to seven electives from the Department’s research postgraduate courses
- Join the programme of more than 30 years in curriculum development and delivery
- Select a theme of your interest (Risk Management theme / Data Analytics theme)

### Master of Statistics Outstanding Performance Scholarship

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### Lifelong Learning Prizes in Statistics

There are Lifelong Learning Prizes in Statistics, each from $5,000 to $10,000, awarded to students on the basis of academic achievement.

### Reimbursable Course(s) by Continuing Education Fund (CEF)*

Six courses in the programme:

- STAT7006 Design and analysis of sample surveys
- STAT8007 Statistical methods in economics and finance
- STAT8015 Risk management and Basel Accords
- STAT8017 Actuarial statistics
- STAT8018 Data mining techniques
- STAT8019 Marketing Analytics

### 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 flexibility 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 he/she has taken in his/her previous study, the Department may not approve the selection in question. Students must obtain a cumulative GPA of at least 2.0 to graduate.

### Curriculum study (applicable for both full-time and part-time modes)

#### Two compulsory courses (12 credits)
- STAT7101 Fundamentals of statistical inference
- STAT7102 Advanced statistical modelling

#### Students with prior background has to take a more advanced course from the same area as replacement:

- REPLACE... WITH...
- STAT7101 Fundamentals of statistical inference
- STAT7102 Advanced statistical modelling

### Theme-specific elective courses (24 Credits)

#### Risk Management theme

- STAT6015 Financial data analysis
- STAT6016 Advanced quantitative risk management
- STAT6017 Operational risk and insurance analytics
- STAT8003 Time series forecasting
- STAT8004 Statistical methods in economics and finance
- STAT8014 Risk management and Basel Accords
- STAT8015 Actuarial statistics
- STAT8017 Data mining techniques
- STAT8020 Quantitative strategies and algorithmic trading
- STAT8021 Big data analytics

#### Data Analytics theme

- STAT6009 Research methods in statistics
- STAT6010 Advanced probability
- STAT7005 Multivariate methods
- STAT7006 Design and analysis of sample surveys
- STAT7007 Categorical data analysis
- STAT7008 Programming for data science
- STAT8003 Time series forecasting
- STAT8010 Biostatistics
- STAT8012 Data mining techniques
- STAT8013 Financial data analysis
- STAT8016 Structural equation modelling
- STAT8020 Bayesian statistics
- STAT8021 Big data analytics
- STAT8022 Structural equation modelling
- STAT8023 Bayesian statistics
- STAT8024 Statistical methods for network data

#### Other elective courses (18 credits)

- STAT8009 Research methods in statistics
- STAT8010 Advanced probability
- STAT7005 Multivariate methods
- STAT7006 Design and analysis of sample surveys
- STAT7007 Categorical data analysis
- STAT7008 Programming for data science
- STAT8003 Time series forecasting
- STAT8010 Biostatistics
- STAT8012 Data mining techniques
- STAT8013 Financial data analysis
- STAT8016 Structural equation modelling
- STAT8020 Bayesian statistics
- STAT8021 Big data analytics
- STAT8022 Structural equation modelling
- STAT8023 Bayesian statistics
- STAT8024 Statistical methods for network data

### Capstone requirement (6 credits)

- STAT8089 Capstone project

Extracted from the Federal Big Data Research and Development Strategic Plan by the Executive Office of the President of the USA.

"Working with numbers is in great demand in the years to come, evidenced in the impressive growth outlook numbers that help bolster the rankings of jobs like Data Scientist and Statistician." - The 2019 Jobs Related Report by www.careercast.com.

"Integration of statistical inference principles as part of Big Data will be essential to resolve these (big data) challenges."
Description of Courses

Compulsory Courses

STAT7101 Fundamentals of statistical inference (6 credits)

Motivated by real problems involving uncertainty and variability, this course introduces the basic concepts and principles of statistical inference and decision-making. Emphasis will be placed on the importance of randomization and sampling in statistical thinking. Topics include basic probability theory, random variables, sampling distributions, point estimation, confidence intervals, and hypothesis testing. The course will also touch upon the role of statistics in the big data era.

Assessment: 2-hour written examination, 40% coursework and 60% examination

STAT7102 Advanced statistical modelling (6 credits)

This course aims at introducing statistical methodologies in analysing financial data. Financial applications and statistical methodologies are interwoven in all lectures. Topics include recent advances in modelling, including machine learning techniques, market microstructure and high frequency data analysis, Financial applications such as risk management, asset pricing, market microstructure and high frequency data analysis, Financial applications such as risk management, asset pricing, market microstructure and high frequency data analysis.

Assessment: 2-hour written examination, 40% coursework and 60% examination

STAT7105 Advanced quantitative risk management and finance (6 credits)

This course covers statistical methodologies and models of importance to risk management, financial engineering and finance theory to market practice via statistical modelling and decision making. Emphasis will be put on empirical analysis. The course addresses the roles of stochastic models in risk management.

Contents include: (a) Basic asymptotic methods and concepts of convergence; (b) stochastic orders; (c) laws of large numbers; (d) central limit theorems; (e) extreme value theory and applications; (f) Financial applications such as risk management, asset pricing, market microstructure and high frequency data analysis, Financial applications such as risk management, asset pricing, market microstructure and high frequency data analysis.

Assessment: 2-hour written examination, 25% coursework and 75% examination

STAT7106 Spatial data analysis (6 credits)


Assessment: 2-hour written examination, 50% coursework and 50% examination

Elective Courses

STAT6008 Research methods in statistics (6 credits)

This course introduces the basic statistical concepts and methods which potential graduate students will find useful for preparing for a work in research on decision sciences.

Assessment: One 2-hour examination, 50% coursework and 50% examination

STAT6009 Financial data analysis (6 credits)

This course introduces basic concepts and techniques in finance, including the role of probability and statistics in market analysis and research. It also covers topics such as statistical methods, market microstructure and high frequency data analysis, Financial applications such as risk management, asset pricing, market microstructure and high frequency data analysis, Financial applications such as risk management, asset pricing, market microstructure and high frequency data analysis.

Assessment: One 2-hour examination, 50% coursework and 50% examination

STAT6010 Advanced probability (6 credits)

This course introduces the basic probability theory and its applications. It covers a wide range of topics, including measure theory and probability, stochastic processes, random variables, and limit theorems.

Assessment: One 2-hour examination, 50% coursework and 50% examination

STAT6011 Computational statistics (6 credits)

This course provides an introduction to computational methods in statistics, including Monte Carlo methods, Markov Chain Monte Carlo methods, and importance sampling.

Assessment: 100% coursework

STAT6012 Design and analysis of sample surveys (6 credits)

This course introduces some statistical concepts and methods which potential students should be familiar with. The course covers the basic principles of survey sampling, including simple random sampling, stratified sampling, and cluster sampling.

Assessment: One 2-hour examination, 50% coursework and 50% examination

STAT6013 Financial data analysis (6 credits)

This course introduces basic concepts and techniques in finance, including the role of probability and statistics in market analysis and research. It also covers topics such as statistical methods, market microstructure and high frequency data analysis, Financial applications such as risk management, asset pricing, market microstructure and high frequency data analysis, Financial applications such as risk management, asset pricing, market microstructure and high frequency data analysis.

Assessment: One 2-hour examination, 50% coursework and 50% examination

STAT6014 Longitudinal data analysis (6 credits)

This course introduces the basic methods for the analysis of longitudinal data, including the use of mixed-effects models and generalized estimating equations.

Assessment: One 2-hour examination, 50% coursework and 50% examination

STAT6015 Actuarial statistics I (6 credits)

This course introduces the basic concepts and techniques in actuarial science, including survival models, life tables, and premium calculations.

Assessment: One 2-hour examination, 50% coursework and 50% examination

STAT6016 Spatial data analysis (6 credits)

This course introduces the basic methods for the analysis of spatial data, including the use of spatial point processes, spatial random fields, and spatially correlated time series.

Assessment: One 2-hour examination, 50% coursework and 50% examination

STAT6017 Statistical computing (6 credits)

This course introduces the basic concepts and techniques in statistical computing, including the use of statistical software packages, data manipulation, and statistical graphics.

Assessment: One 2-hour examination, 50% coursework and 50% examination

STAT6018 Modern statistics (6 credits)

This course introduces the basic concepts and techniques in modern statistics, including the use of non-parametric methods, graphical models, and computational methods.

Assessment: One 2-hour examination, 50% coursework and 50% examination

STAT6019 Marketing analytics (6 credits)

This course introduces the basic concepts and techniques in marketing analytics, including the use of statistical methods for market segmentation, customer analysis, and marketing decision making.

Assessment: One 2-hour examination, 50% coursework and 50% examination

STAT6020 Quantitative strategies and algorithmic trading (6 credits)

This course introduces the basic concepts and techniques in quantitative strategies and algorithmic trading, including the use of statistical methods for market microstructure and high frequency data analysis, Financial applications such as risk management, asset pricing, market microstructure and high frequency data analysis, Financial applications such as risk management, asset pricing, market microstructure and high frequency data analysis.

Assessment: One 2-hour examination, 50% coursework and 50% examination

STAT8021 Big data analytics (6 credits)

This course introduces the basic concepts and techniques in big data analytics, including the use of statistical methods for large-scale data analysis, Financial applications such as risk management, asset pricing, market microstructure and high frequency data analysis, Financial applications such as risk management, asset pricing, market microstructure and high frequency data analysis.

Assessment: One 2-hour examination, 50% coursework and 50% examination

STAT8089 Econometric methodology (6 credits)

This course introduces the basic concepts and techniques in econometric methodology, including the use of statistical methods for economic forecasting, Financial applications such as risk management, asset pricing, market microstructure and high frequency data analysis, Financial applications such as risk management, asset pricing, market microstructure and high frequency data analysis.

Assessment: One 2-hour examination, 50% coursework and 50% examination

STAT8202 Financial time series analysis (6 credits)

This course introduces the basic concepts and techniques in financial time series analysis, including the use of statistical methods for financial data analysis, Financial applications such as risk management, asset pricing, market microstructure and high frequency data analysis, Financial applications such as risk management, asset pricing, market microstructure and high frequency data analysis.

Assessment: One 2-hour examination, 50% coursework and 50% examination

STAT8204 Risk management and Basel Accords (6 credits)

This course introduces the basic concepts and techniques in risk management and the Basel Accords, including the use of statistical methods for financial risk management, Financial applications such as risk management, asset pricing, market microstructure and high frequency data analysis, Financial applications such as risk management, asset pricing, market microstructure and high frequency data analysis.

Assessment: One 2-hour examination, 50% coursework and 50% examination
STAT7102 Advanced statistical modelling (6 credits)
This course introduces modern methods for constructing and evaluating statistical models, including model building, data analysis and computational methods. It is suited to students who have an interest in applying modern computationally intensive methods in statistics. It emphasizes the role of computation as a fundamental tool of discovery in data analysis, of statistical models and of modern computationally intensive methods in statistics. This course aims to provide students with the knowledge of the Basel Accords and practical critical issues. STAT8089 Capstone Project or equivalent
A project in any branch of statistics or probability will be chosen under the A project in any branch of statistics or probability will be chosen under the

## Elective Courses

### STAT6009 Research methods in statistics (6 credits)
This course introduces some statistical concepts and methods which potential graduates will find useful in preparing for work on a research degree in statistics or in the use of statistical methods in other academic disciplines.

### STAT6013 Financial data analysis (6 credits)
This course covers statistical methods and models of importance to risk management and finance. Focus is on applications of state-of-the-art statistical techniques and their underlying theory. Contents may be selected from: (1) Linear regression models; (ii) Generalized linear models; (ii) Mixed models; (iv) Kernal and local polynomial regression; selection of smoothing parameters; (v) Hidden Markov models and Bayesian networks.

### STAT8014 Risk management and Basel Accords (6 credits)
Being an important part of the financial market, Hong Kong has always been on the alert for the risk in the banking and financial industry. We have weathered many attacks and challenges during the global financial crisis started in 2007/08. This risk has been the primary focus of most policy makers. Undoubtedly, Hong Kong's financial market has made good efforts to the industry to fully be aware of the relevant risk management, including the Basel Accords. This course aims to introduce the Basel Accords and its applications, including risk models on market, credit and operational risks and the integration techniques, along with the knowledge of the Basel Accords and practical critical issues.

### STAT8019 Marketing analytics (6 credits)
This course introduces various statistical models and methodology in marketing management. It emphasizes the role of computation as a fundamental tool of discovery in data analysis, of statistical models and of modern computationally intensive methods in statistics. This course aims to provide students with the knowledge of the Basel Accords and practical critical issues.
The Master of Statistics of the University of Hong Kong is well designed for students to join industries with advanced statistical, computational, and data science literacy. All of the courses are suitable for both professionals to polish their quantitative skills and graduates to pursue further study. It offers me great exposure in statistical analysis, mathematical foundations, and data analytics, which are essential skills valued by international companies. It is also a challenging and up-to-date program, the state-of-the-art knowledge of statistical literacy.

Over the past 2 years, the MStat program brought me a fruitful experience. Not only did I learn a lot about advanced data analytics techniques, but also got a lot of hands-on experience in applying them to practical problems. It also opens my mind about the range of applications of statistics and data analytics in different fields. Moreover, the program provided me with the opportunity to meet with people from different backgrounds and we shared experience with each other. I am an actuary and there is an increasing focus on predictive analytics in my current field. The programme gives me the opportunity to learn how to apply the techniques learnt to discover predictive patterns and relationships for better use.

WONG Cheuk Yin [MStat Part-time Graduate 2018]
Senior Actuarial Consultant, HSBC insurance (Asia) Ltd.

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 during- time from Monday to Saturday for courses having course codes STATXX00, 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 STATXXXX or STATXX00. All lectures are conducted in English at HKU.

The Master of Statistics of the University of Hong Kong enables students to acquire both a solid understanding of statistical theory and extensive knowledge about state-of-the-art applications. Thanks to the variety of courses, the programme offers unique opportunities to learn more about new areas in statistics, data analytics and risk management. What I liked most during my MStat studies was their friendly and helpful staff and professors who taught me very valuable lessons about statistics and data analytics. The diversity and depth of the programme provided me with a fresh perspective and enabled me to acquire both a solid understanding of statistical theory and extensive knowledge about state-of-the-art applications. Thanks to the variety of courses, the programme offers unique opportunities to learn more about new areas in statistics, data analytics and risk management.

ALEJANDRO COBO PEKENBROCK [MStat Full-time Graduate 2017]
Analyst in Finance Division, Morgan Stanley Asia-Latin American

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ALEJANDRO COBO PEKENBROCK [MStat Full-time Graduate 2017]
Analyst in Finance Division, Morgan Stanley Asia-Latin American
Mitat is an one-year program, which means that a lot of things need to be done in a short time, and that you have to balance the school work, internship and personal life. That’s how I learn about time management, an important skill in future career. Also, we offered a career preparation course consisting of several workshops and mock interviews. These are very practical, and helped me a lot in the job application. What’s more, the coursework does me a lot to apply the knowledge in real cases, not limited to books.

And the most important thing is, HKU offers all students a great platform to face the current background, an opportunity to work in the whole new environment.

CHEN Yao (MIT Stat Full-time Graduate 2019)

Proving Assistant, China Taiping Insurance (HK) Ltd

I thoroughly enjoyed my time as a student in Mitat program. During my time here, apart from theory I was able to develop many skills which have proven to be vital to me and my career going forward. These include skills such as problem solving skills, advanced data analytics techniques, and also soft skills like job-hunting skills. Currently I am working as a data analyst at [5% where I use the tools I learnt during my studies] currently and have been working on different projects and business strategy to client. Working as a data analyst is exciting, each day brings new challenges.

WU Qiyong (MIT Stat Full-time Graduate 2019)
Stat Accountant, Data Analytics, Ernst & Young

Mitat Program provides an excellent path to students from non-statistical backgrounds, like myself, to acquire the most key data analytics knowledge. Programme coursework is independent on theoretical background to practical experience. I think that Mitat is a program applicable to me and the project at my role as a quantitative strategist. The Programme provides us with abundant opportunities to apply our learning of both statistical theories and programming languages like Python and R. I am a quantitative strategist with classroom from wide range of professions. All these have definitely sharpened our techniques to cope with hands-on problems – an essential lifelong learning skill. I highly recommend this programme to prospective students who are eager to gain exposure to the field of data science.

HO Chun To (MIT Stat Part-time Graduate 2019)
Quantitative Strategist, Asia Quantitative Equity Research, Morgan Stanley

Examples of backgrounds of admitted students in recent years:

- 

HKSAR Government departments/units:
  - Research Manager
  - Research Statistician
  - Research Officer
  - Program Officer
  - Statistical Assistant

- 

Education profession:
  - Senior Lecturer
  - Teacher
  - Librarian
  - Mobile Editor
  - Research Assistant

- 

Optional Summer Courses:
  - Preparatory courses in matrices and calculus, and introductory statistics, for part-time students who need to rejuvenate their skills. (August, 2020)
  - 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, 2020)
  - Tutorials in SAS for all the students who need to rejuvenate their skills in data management using SAS (August, 2020).

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The master of statistics of the University of Hong Kong is well designed for students to join industries with advanced analytics and data insights. All of the courses are suitable for both professionals to refresh their quantitative skills and graduates to pursue further study. It offers me great exposure in statistical analysis, management of data mining and data analysis, which are essential skills valued by international companies. It is also a challenging and up-to-date program, the step of data science.

ILI Cheung (MIT Stat Part-Time Graduate 2019)
Regulatory Reporting Manager, DBCC Wing Hang Bank

Over the past 2 years, the Mitat program brought me a fruitful experience. Not only learnt a lot about advanced data analytics techniques but also got a lot of hands-on experience in applying them to practical problems. It also opens my mind about the range of application of statistics and data analytics in different fields. Moreover, the program provides me with the opportunity to meet with people from different backgrounds and we shared experience with each other. I am an actuary and there is an increasing focus on predictive analytics in my current field. The Mitat program broadens my horizon and foundation knowledge to develop how to apply the techniques learnt to discover predictive patterns and relationships for actuarial use.

WONG Cheuk Yin (MIT Stat Part-time Graduate 2018)
Senior Actuarial Consultant, HKB insurance (HK) Ltd

The Master of Statistics of the University of Hong Kong enables students to acquire a solid understanding of statistical theory and extensive knowledge about state-of-the-art applications. Thanks to the variety of courses offered, I have come to learn more about areas in statistics, data analytics and risk management. What I liked most during my Mitat studies was the friendly environment and shared experience with each other. I am an actuary and there is an increasing focus on predictive analytics in my current field. The Mitat program broadens my horizon and foundation knowledge to develop how to apply the techniques learnt to discover predictive patterns and relationships for actuarial use.

ALEJANDRO COBO PEIBENROCK (MIT Stat Full-time Graduate 2017)
Analyst in Finance Division, Morgan Stanley Asia Limited

The Programme extends over not less than one academic year for full-time students or two academic years for part-time students. The programme is open to students of Master of Statistics Programme only. It provides students with the flexibility to study part-time, which is very important for students who are also working and who need to balance their work and studies.

Winn Inns (Part-Time Graduate 2018)
Programme Manager, Hong Kong Institute of Education

In terms of coursework, the programme offers a wide range of courses that cover both theoretical and practical aspects. The programme is designed to provide students with the knowledge and skills required to work in a variety of industries, including finance, technology, and government.

WANG Mei (Part-Time Graduate 2018)
Senior Actuarial Consultant, HKB insurance (HK) Ltd

The MStat program gave us a great platform to face the current background, an opportunity to work in the whole new environment. We were able to gain a lot of hands-on experience in applying them to practical problems. The program also provided us with the opportunity to meet with people from different backgrounds and we shared experience with each other. I am a PhD student and there is an increasing focus on predictive analytics in my current field. The MStat program broadens my horizon and foundation knowledge to develop how to apply the techniques learnt to discover predictive patterns and relationships for actuarial use.

WONG Cheuk Yin (MIT Stat Part-time Graduate 2018)
Senior Actuarial Consultant, HKB insurance (HK) Ltd

The Master of Statistics of the University of Hong Kong enables students to acquire a solid understanding of statistical theory and extensive knowledge about state-of-the-art applications. Thanks to the variety of courses offered, I have come to learn more about areas in statistics, data analytics and risk management.

The Programme extends over not less than one academic year for full-time students or two academic years for part-time students. The programme is open to students of Master of Statistics Programme only. It provides students with the flexibility to study part-time, which is very important for students who are also working and who need to balance their work and studies.
Tuition Fees
The composition fee for the full-time programme is HK$186,000# for the 2020 intake and that for the part-time programme is HK$93,000# 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$3,100# per credit in the academic year 2020-21.

# Subject to approval

Target Students
It is a programme ideal for
1. those whose wish to advance their quantitative and analytical skills to prepare for a data-focused career path, and
2. those who wish to pursue further study in the field of statistics after studying science, social sciences, engineering, medical sciences, information systems, business and finance in their undergraduate studies.

Admission Requirements
A Bachelor’s degree with Honours, or an equivalent qualification, with knowledge of matrices and calculus, introductory statistics and linear modelling.

Application
Main Round: December 15, 2019
Clearing Round: 12 noon, January 31, 2020

Programme Details:
https://saasweb.hku.hk/programme/mstat.php

Online application:
https://aal.hku.hk/tpg/

Enquiries
Ms Clara Lian
Department of Statistics & Actuarial Science
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Support for International Students
https://cedars.hku.hk/ Useful information for students:
https://cedars.hku.hk/publication.php

Programme Director
Dr Y K Chung
BSc, MPhil CUHK; PhD HK
Department of Statistics & Actuarial Science

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Professor K C Yuen
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Dr S Y Zhang
Dr Z Q Zhang
Dr K Zhu

BSc, MA, MAH, MPhil, PhD UC3M
BScActuarSci, PhD HK, ASA
BSc, MSc ANU, PhD CUHK
BSc, MSc, Oxford
BSc, MPhil CUHK, PhD HK
BSc, MSc, London, PhD HK, DIC
BSc, MSc, HK
BSc, MA, DipEd, Sydney
BSc, PhD, HK
BA, St Thomas, MA New Brunswick, PhD, HK
BA, HK, PhD Wisconsin
BScActuarSci, MPhil HK, PhD British Columbia
BA, PhD, Cantab
BA, MBA, HK
BSc, MAEcon, PhD, Sydney
BSc, MSc, Peking, PhD, HK
BSc, USTC, PhD, Rutgers
ScD, Harvard
BSc, HK, MBA, NSW
PhD, NUS
BScActuarSci, PhD, HK, FSA, CERA, FRM
BScActuarSci, MPhil, HK, PhD, Waterloo, FSA
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BSc, USTC, PhD, Columbia
BSc, Inner Mongolia, MMath, Waterloo,
PhD, Alberta, ASA, HonFA
BSc, MSc, PhD, Paris-Sud Orsay
MA, Temple, MSc, PhD, N Carolina
BSc, PhD, HK
BSc, MSc, PhD, Calgary, ASA
BSc, MPhil, HKBU, MSc, PhD, Michigan
BSc, Nankai, MSc, PhD, MCSU
BSc, Nankai, MSc, E China Normal, PhD, HK
BSc, USTC, PhD, HKUST