

**THE UNIVERSITY OF HONG KONG  
FACULTY OF BUSINESS AND ECONOMICS**

**Master of Philosophy (MPhil)/Doctor of Philosophy (PhD)**

**COURSE DESCRIPTION**

The courses listed below may not be offered every year.

All courses taken by MPhil/PhD students are assessed on a pass/fail basis.

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**ACCT6013 Doctoral Accounting Seminar I**

The purpose of this course is to provide an overview of various topics in accounting relating to faculty research interests and expertise. We will discuss both classic papers on financial markets, and faculty members' own research in these areas. The course will be based on lectures, student presentations, and discussions.

Remarks: This course is to replace BUSM6013 from 2018-19

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**ACCT6014 Doctoral Accounting Seminar II**

This course focuses on empirical financial accounting research related to capital market issues and managerial incentives. The course involves the discussion of selected research papers that will help students to understand the evolution, theoretical foundations, and research methods of capital market literature.

Remarks: This course is to replace BUSM6014 from 2018-19

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**ACCT6017 Theoretical Accounting Research**

This course introduces selected topics of theoretical accounting research, focusing on the usefulness of financial reporting information in capital markets, the behaviour of firms in disclosing private information, and issues related to auditing of firms' publicly released financial reports. While the theme of the seminar is theoretical research, we will also bring related empirical studies into discussion and show how theory is important for properly developing empirical research.

Remarks: This course is to replace BUSM6017 from 2018-19

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## **ACCT6018 The Philosophy of Economics and Its Implications for Accounting and Finance**

This course teaches doctoral students the philosophy of economics that has shaped the major development of the economics-based research such as accounting and finance. It will explain the history of a number of important issues in economics-based research, including positive vs. normative economics, the relation between theory and measurement (empirics), causality, decision making and hypothesis testing, and the similarity and differences between natural science and economics. Along the way a number of seminal papers in accounting and finance will be discussed in the context of these philosophical debates and will be connected with the current research frontier and journal orientation.

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## **ACCT6019 Capital Market Research in Accounting**

This course is one that focuses on empirical market research in the accounting discipline. It will have significant coverage of the role of disclosure in the capital market.

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## **ACCT6020 China-related Topics in Accounting and Finance Research**

There has been an exponential growth in the number of China studies in the leading accounting, finance and economics journals. The rise in China-related research mirrors the country's increasing importance on the global stage. In this course, we will discuss how institutions shape the role of accounting in China's transitional economy and learn about the unique contribution of China-centric studies. Besides accounting studies, our readings will also cover the classic China-based studies in finance and economics literature. In particular, the main objective of this course is to provide students a complete framework that is useful for identifying research topics in China-based accounting research and embarking on new research agenda in accounting research.

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## **ECON6002 Selected Topics in Microeconomics<sup>#</sup>**

This is a course of axiomatic choice theory in which classic results as well as current developments are surveyed. Students are expected to be proficient in fundamentals of microeconomic theory, analysis and probability theory. Potential topics include choice under uncertainty, subjective beliefs and updating, ambiguity aversion, temptation and self-control.

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## **ECON6005 Econometric Theory I<sup>#</sup>**

This course is an introduction to econometric theory and applications at an advanced level. Students are expected to be proficient in calculus, matrix algebra, and econometrics at the undergraduate level. Potential topics to be discussed include the classical linear model, generalized method of moments, and multiple equation models.

Remarks: Students may be required to pass a mathematics test in order to take the course.

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## **ECON6010 Monetary Policy: Theory and Practice<sup>#</sup>**

This course is an introduction to macroeconomic policies at the PhD level. Students are expected to be proficient in calculus, linear algebra, and macroeconomics at the undergraduate level. Potential topics to be discussed include: 1. basic classical and New Keynesian models; 2. linear-quadratic approximation methods; 3. optimal and robust controls; 4. model uncertainty; 5. time series econometrics.

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## **ECON6011 Microeconomic Theory<sup>#</sup>**

This course is an introduction to microeconomic theory at the PhD level. Students are expected to be proficient in calculus, and have some basic knowledge in real analysis. Potential coverage of the course includes, but not limited to, General Equilibrium, Informational economics, and Mechanism Design. The intended audience for this course is all first year PhD students and MEcon/MBA/Undergraduate students who are research-oriented or are interested in pursuing PHD in the near future. The course is NOT application-oriented. For an application-oriented Microeconomic course, one may consider taking ECON6021 A/B instead. A good way to gauge the difficulty level of the course is to flip through the textbook listed in the course outline.

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## **ECON6012 Macroeconomic Theory<sup>#</sup>**

This course covers neo-classical macroeconomics, the Keynesian model and its problems, the consumption function and investment and economic fluctuations, supply and demand of money, the counterrevolution in monetary theory, inflation and unemployment and alternative policies for dealing with them, and open economy macroeconomics.

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## **ECON6036 Game Theory and Applications<sup>#</sup>**

This course will explore the multi-person decision-making situations when players' payoffs depend on other players' choices. Game theory has notable applications in many fields, such as economics, law, business, finance and political science. We will first review the theoretical frameworks and then focus on applications such as reputation, communication, collective decision-making, modelling knowledge, and global games. Students are expected to know basic probability theory and calculus, and to be comfortable thinking mathematically and doing proofs.

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## **ECON6052 Selected Topics in Macroeconomics<sup>#</sup>**

This is a special-topics course on macroeconomics (i.e., the study of aggregate or economy-wide behaviour). Presumably, the topics may vary from year to year, depending on the interest of the instructor. In any case, they will be related in one way or another to the central issues of (long-run) growth and (short-run) fluctuations, as well as the analysis of growth and stabilisation policies. This year the course will focus on macro-finance, firm dynamics, and heterogeneous agent models. This course is aimed to introduce PhD students the research frontier of dynamic and quantitative

models in macroeconomics and finance. Students are expected to use these tools to study economic growth, business cycles, consumption, savings, investment, asset pricing, and government policies.

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### **ECON6054 Graduate Seminar in Economics**

This course prepares PhD students to conduct independent research, make academic presentations, and start writing their theses through a series of student-led seminars. Students are required to take turns to present classic papers of their fields and their own research proposals in class. By the end of this course, each student is expected to submit a research paper that can be developed into part of his or her dissertation.

Remarks: This course is to replace ECON6054A 'Graduate Seminar (Economics)' from 2018-19

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### **ECON6056 Econometric Theory II<sup>#</sup>**

This course is a continuation of Econometric Theory I (ECON6005). Potential topics to be discussed include panel data, maximum likelihood estimation, nonlinear regression models, time series models, and cointegration. The course will examine both the theoretical properties of these estimators and their implementation with professional statistical software.

Prerequisite: ECON6005

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### **ECON6059 Selected Topics in Macroeconomics II<sup>#</sup>**

This course covers topics in the mechanics of economic growth and sources of income and growth differences across countries, with an emphasis on heterogeneous firm innovation. Related questions include innovation and endogenous growth, resource (mis)allocation, competition, and market power. This course introduces a wide range of theoretical models and empirical studies based on classic papers and some recent research. It will help students develop some key tools of dynamic economics useful in macroeconomics.

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### **ECON6081 Quantitative Macroeconomics: Data, Model, and Policy<sup>#</sup>**

This course will equip students with the numerical tools (data skills and computation skills) necessary to tackle interesting questions in quantitative macroeconomics. The course consists of three major parts: data, model, and policy. The first part focuses on showing students how to deal with macro and micro data in economics and more importantly, how to find interesting empirical patterns from the data. The second part is about the study of computational methods and algorithms useful to solving and analyzing macro models. The third part is devoted to ongoing frontier research in macroeconomics based on heterogeneous-agent models.

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## **ECON6096 Computational Methods in Economics<sup>#</sup>**

In modern economic research, computers enhance our capacity of solving complex problems. Computation is particularly important in fields involving massive data. The objective of this course is to introduce graduate students to computational approaches for solving economic models, with an emphasis on dynamic programming and simulation-based econometric methods. We will formulate economic problems in computationally tractable form and use techniques from numerical analysis to solve them. The substantive applications will cover a wide range of problems including labor, industrial organization, macroeconomics, and international trade.

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## **ECON6098 Advanced Topics in Labor Economics<sup>#</sup>**

The course will prepare research students to conduct own research in the field of labor economics as well as related areas such as personnel economics, public economics and family economics. In this course, we will cover a wide range of theoretical models and empirical studies based on cutting-edge classic and recent research papers. During the course, students will be encouraged to develop own research ideas.

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## **ECON6099 Topics in Growth and Development<sup>#</sup>**

This course introduces frontier research topics and methods in growth and development to students. This year, the topics will include quantitative models of trade, migration, spatial structural change, technology innovation and diffusion, institutional change, endogenous growth, and industrial policy.

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## **ECON6801 Applied Econometrics**

The goal of this course is for graduate students to learn a set of statistical tools and research designs that are useful in conducting high-quality empirical research on topics in applied microeconomics and related fields. Since most applied economic research examines questions with direct policy implications, this course will focus on methods for estimating causal effects. This course differs from many other econometrics courses in that it is oriented towards applied practitioners rather than future econometricians. It therefore emphasizes research design (relative to statistical technique) and applications (relative to theoretical proofs).

Remarks: Students should be familiar with basic probability and statistics, matrix algebra, and the classical linear regression model.

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## **ECON6802 Historical Economic Development**

The importance of history in economic development has received growing attention. This course examines the values of history in mainly three aspects. The first pertains to the economic legacies of historical institutions, culture and critical junctures, and channels and mechanisms through which history matters. The second is the advantage of historical ‘natural’ experiments in testing general economic issues. Finally, we will discuss the application of historical studies in the context

of China. The reading materials are mostly quantitative, comparative and interdisciplinary, with a special focus on identifying a causal relationship. Drawing upon examples of research in recent years, we discuss with students such issues as how to motivate a variety of research topics, how to design and formulate research strategies, and how to organize and present their research in a coherent fashion. Students are expected to actively participate in class discussion and present their own research proposal.

Prerequisite: ECON6011, ECON6012, ECON6005 and ECON6801

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### **ECON6803 Topics in International Trade**

This course focuses on International Trade, covering both theory and applications. The overall goal is to develop a broad conceptual understanding of ongoing research in international trade and familiarity with the analytical techniques used by economists in studying those questions and in developing policy recommendations.

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### **ECON6804 Topics in Macroeconomic Research of China**

The course will cover some selected research topics relevant to China, such as growth, structural change, trade and migration, banking system and monetary policy, DSGE models with Chinese characteristics. For each topic, there will be discussions of both the appropriate theoretical framework and methods and their applications to the Chinese economy.

Prerequisite: ECON6012

Remarks: This course is discontinued and replaced by ECON6099.

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### **ECON6805 Quantitative History Seminar**

Quantitative history has increasingly been used in economic and other social science studies. This course introduces students to the literature that explores unique historical data and settings to address important social science questions. Course materials are primarily drawn upon seminal papers that examine the deep roots of economic, social and institutional development and use historical natural experiments to establish causality. The course is run in the form of seminars, in which students are directed to review and discuss the assigned papers and present their own independent research in class.

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### **ECON6806 Topics in Empirical Industrial Organization**

This PhD class covers selected topics in Empirical Industrial Organization. We will focus on topics related to firm heterogeneity, endogenous decisions, market competition, and the resulting industry dynamics. We will cover firm production analysis, demand analysis, innovation, market structure, and industry dynamic equilibrium. Besides the classical literature, we will also discuss market friction and the recent development of relevant topics. We will use both the reduced-form analysis and structural approach in Empirical IO in this course.

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**ECON6807 Political Economy of Institutions and Development**

This course is intended as an introduction to the emerging field of political economy of institutions and development. Its purpose is to give students both a sense of the frontier research topics and a good command of the tools in the area. It explores how political institutions and processes influence economic development and how economic outcomes, in turn, shape political dynamics. The course takes a comparative perspective, putting various institutions in comparison with a particular focus on developing countries.

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**FINA6016 Asset Pricing Theory**

This course is an introductory PhD level course on the basic theories of asset pricing. It consists of five parts. The first part deals with individual choices under uncertainty, including expected utility theory, risk aversion, and two-period consumption portfolio problems. The second part deals with equilibrium pricing theories, including implications of no arbitrage and stochastic discount factor, risk sharing, aggregation, and consumption-based pricing in complete markets, mean-variance efficiency and the Capital Asset Pricing Model. We also explore the relation between these various pricing theories and extend the treatment of individual consumption/portfolio problems and equilibrium pricing to a multi-period setting. In the third part, we review recent developments in asset pricing by introducing some stylized facts and new theories. The fourth part introduces asymmetric information in financial markets. The fifth part provides a brief introduction of the recent development of market frictions in financial markets, including leverage constraints, short selling constraints and the interaction between financial markets and real economy.

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**FINA6017 Corporate Finance Theory**

This course covers selected PhD-level research-related lectures in corporate theories, real options and financial intermediation. The instructors will lecture selected topics and associated papers.

Remarks: This course is to replace ECON6017 'Financial Economics' from 2018-19

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**FINA6052 Empirical Asset Pricing**

This course is an in-depth study of existing empirical work in asset pricing, including econometric and statistical methods. The focus is on empirical studies of the fundamental economic questions in asset pricing. This course consists of reading, presenting, and discussing articles on the general subject of empirical asset pricing.

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**FINA6053 Empirical Corporate Finance**

This is a special course that deals with various topics in empirical corporate finance. Topics covered may vary from year to year, depending on the research interests of the instructor.

Remarks: This course is to replace ECON6053 ‘Selected Topics in Financial Economics’ from 2018-19

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### **FINA6054 Selected Topics in Financial Research**

This course prepares PhD students to conduct independent research, make academic presentations, and start writing their theses through a series of student-led seminars. Students are required to take turns to present classic papers of the assigned field and their own research ideas in class. By the end of this course, each student is expected to submit a research proposal that can be developed into part of his or her dissertation.

Remarks: This course is to replace ECON6054B ‘Graduate Seminar (Finance)’ from 2018-19

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### **FINA6055 Empirical Programming Methods for Business Research**

This course provides students a foundation in managing and analysing datasets for empirical business research, with a particular focus on finance and accounting. The first part of the course focuses on developing programming skills. Methods covered include databases, data custodianship, statistical scripting languages, automation, regression analysis and high-performance computing. The second part of the course focuses on empirical methods – building new datasets and conducting high-quality replications of existing papers. Some discussion of alternative data will be provided. Students’ primary mode of learning will be projects and hands-on programming experience. In some assignments, students will be required to contribute to a communal repository of data and code, helping to accelerate students in acquiring proficiency in conducting their own empirical research.

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### **FINA6056 Macro Finance**

This Ph.D. course is designed to introduce students the theoretical and empirical advances in macro finance and take students to the frontier of research. The course covers key empirical facts on the linkage between financial markets and the real economy and the theoretical frameworks to interpret the facts.

Prerequisite: ECON6012, ECON6005, FINA6016 and FINA6052

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### **FINA6057 Selected Topics in Finance Theory**

This course is a Ph.D. level course on the frontier of finance theory. It consists of two parts. The first part focuses on the frontier of corporate finance theory with an emphasis on the latest development of the corporate finance theory literature, for example, to extend the classic corporate

finance models to the general equilibrium and dynamic framework and embed the micro frictions into the macroeconomic framework. The second part focuses on the frontier of information economy in finance. Students will be introduced to the classic information models in finance, how public information affects financial markets, the interaction between market friction and information, investors' information acquisition and their implications, and the interaction between financial market and the real economy.

Prerequisite: ECON6011, FINA6016 and FINA6017; or special approval from course instructors

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### **FINA6058 Empirical Methods in Household and Corporate Finance**

The overall approach of the course is to understand the common methods and research design in applied empirical research, combined with an intensive reading and replicating (and extension) of prior empirical work. The focus will be on topics in household finance, empirical corporate finance and investments, focusing on methods common in applied microeconomics. The material in the course is entirely complementary, instead of substitute, to econometrics classes and courses dedicated to specific topics. The focus is instead on designing a research study, conducting credible inference based on empirical data, and empirical methodologies including software considerations related to data custodianship and high-performance computing.

Prerequisite: Students should have taken courses in statistics and econometrics as well as finance (at least at the masters' level)

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### **IIMT6004 Research Methodologies in Information Systems**

This is a broad overview course about doing empirical Information Systems research. We will examine and evaluate a variety of methods, including lab and field experiments, surveys, etc. In addition, we will cover critical issues used to evaluate the appropriateness of methods, including reliability, validity, levels of analysis, statistical power and significance testing. By the end of the course, students should have enough knowledge about different methods to identify those most useful for their own research, and to effectively evaluate their own and other's research methodology.

Remarks: This course is to replace BUSM6004 from 2018-19

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### **IIMT6005 Survey of Research in Information Systems**

Survey of research topics related to technical/management issues illustrating the impact of information technology on organisations; for MPhil/PhD students in information systems.

Remarks: This course is to replace BUSM6005 from 2018-19

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### **IIMT6006 Research Seminars in Information Systems**

The aim of this course is to familiarize students with main theories, research, methods, and areas

in information systems (IS) research. In this course, students will be exposed to a variety of methods, including behavioral, economical, technical, and social network related research skills, and a variety of research domains, including IT value, IT usage, ecommerce, healthcare, platform, etc. Students will learn how to identify research gaps, discover research questions, adopt appropriate research methods, and evaluate research relevance, rigor, and contributions.

Remarks: This course is to replace BUSM6006 from 2018-19

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### **IIMT6007 Empirical Research in Economics of Information Systems**

This course covers the foundations of empirical research in Economics of Information Systems (IS) and prepares students for conducting their own academic research in this area.

Prerequisite: ECON6005 or ECON6801

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### **IIMT6015 Research Methodologies in Operations Management**

This course introduces students to main research methods (e.g. quantitative model-based research, deterministic optimization, stochastic modeling and simulation) and topics in operation management. The articles in major operations management journals serve as the examples for selection of methodology and justification of research contribution. The students are also required to practice on research design for specific research questions.

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### **IIMT6016 Research Seminars in Operations Management**

This course exposes students to cutting-edge research on operations management topics using both theoretical models and empirical analysis. It will start with an introduction of theoretical models that are commonly used in the operations management field to build hypothesis and then strengthen students' ability to design and conduct empirical research related to their models. We will study classical papers, review articles and recent contributions related empirical research in operations management.

Remarks: This course is to replace BUSM6016 'Research Seminars in Operations and Innovation Management' from 2018-19

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### **IIMT6017 Research Methodologies in Business Analytics**

This is the core course that prepares PhD students in Business Analytics for their research career. It offers a broad overview of classical and advanced statistical methods with a focus on intuition, methodology and necessary theory for deeper understanding. It starts with advanced topics of classical statistical methods in point estimation, hypothesis testing and linear regression, and then moves to in-depth discussions of generalized linear model, time series models for asset returns and volatility, continuous-time financial models, high-dimensional inference for linear regression and factor analysis, large covariance estimation and risk management, and non-parametric statistical methods. Along the way, one will pick up probability tools and interesting theory on feature and

model selection, statistical inference and decision optimality.

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### **IIMT6018    Research Topics in Business Analytics**

This is the core course for PhD students in Business Analytics (BA) that accompanies the course Research Methodology in BA. It offers more advanced training with an emphasis on the state-of-the-art methodology of high-dimensional statistical learning. Students will read many recent papers and participate actively in discussion and presentation.

Prerequisite: ECON6005 or equivalent

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### **IIMT6019    Machine Learning and Predictive Modelling in Business Research**

With the increased availability of large data sets in a variety of formats from multiple sources, two new trends have emerged in business research. The first is the application of machine learning techniques to extract variables from unstructured data and use these variables in explanatory research. The second is an increased number of projects that focus on proposing a predictive model (often based on machine learning or artificial intelligence) instead of an explanatory model in traditional research. This course provides students with an understanding and experience on these two strands of research.

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### **IIMT6020    Optimization Methods for Business Analytics**

Modern business environment involves substantial uncertainty, and meanwhile generates vast amount of data. This course introduces modern optimization methodologies that underlie business analytics to facilitate data-driven decision-making. Application areas include digital marketing, inventory management, revenue management, personalized medicine, and finance.

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### **IIMT6021    Theoretical Approach to Information Systems Research**

Theory development is a key goal of information systems (IS) research and is critical for the growth of the field as a scientific discipline. Leading IS journals hold up this goal for scholarly emulation, and a paper's theoretical contribution is a key criterion for its publication. In this course, PhD students are expected to be equipped with necessary foundations and skills to engage in both deductive and inductive theory development in information systems research. Deductive theory building involves drawing on the relevant literature to identify opportunities for new theory. Students will learn theoretical building that incorporates several stages: identifying a theoretical space and focus; searching for appropriate literature; defining concepts; theorizing relationships between concepts; formalizing concepts as constructs with proposals; testing the proposed theoretical relationships empirically. Inductive theory building involves drawing on data/phenomena, often informed by the literature, to identify opportunities for new theory. Students will also learn how research gets developed through review and revision process. The course is seminar-based, organized around student presentation, class discussion, and faculty

supervision. A list of topics and related research papers will be provided.

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### **MGMT6008 Research Seminars in Human Resources Management and Organisational Behaviour I**

This course guides students to understand research in multiple sub-areas of human resources management and organizational behavior. A wide range of selected topics in the field will be discussed with students, aiming to not only introduce students to those topics, but also inspire students to identify important and value-added research questions of their own.

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### **MGMT6009 Research Seminars in Human Resources Management and Organisational Behaviour II**

The research seminars prepare MPhil/PhD students to conduct advanced research in the areas of human resource management and organisational behaviour.

Remarks: This course is to replace BUSM6009 from 2018-19

Prerequisite: MGMT6008

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### **MGMT6010 Graduate Workshop in Management and Strategy**

This course is designed to provide a forum for discussion of i) doctoral students' independent research, and ii) departmental seminar speakers' work. Students will be honing integral academic skills both as a presenter (presenting their ongoing research project) and an audience member (providing constructive feedback, asking good questions, and writing paper reviews).

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### **MKTG6002 Research Seminars in Marketing I: Consumer Behaviour**

This course is to provide doctoral students with a solid foundation for critical thinking in consumer behaviour. This seminar focuses on topics related to self-regulation, social relationships, and decision-making. The readings consist of articles from premier journals and book chapters in marketing and social psychology.

Remarks: This course is to replace BUSM6002 from 2018-19

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### **MKTG6003 Research Seminars in Marketing II: Quantitative Studies**

This seminar focuses on using quantitative models to study different marketing topics. These topics cover both consumer decisions and firm strategies. The survey covers classic as well as contemporary works in these areas. Participants in the seminar are encouraged to design a model in areas of their interests as part of the seminar.

Remarks: This course is to replace BUSM6003 from 2018-19

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### **MKTG6004 Digital Methods for Human Behaviour Research**

This course has a strong emphasis on the interdisciplinary research in psychology, economics, sociology, and general social sciences involving social networks, mobile phone data, mobility data, digital trace data, other field data, and big data analytical approaches. In addition to studying the literature, this seminar course tries to help students identify interesting research questions, develop appropriate empirical approach, and learn to arbitrage cutting edge developments in general social sciences for within-field publications. This seminar course requires extensive reading across different disciplines, creative and adaptive thinking, and active participation.

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### **MKTG6005 Research Methods for Consumer Behaviour Research**

The course aims to familiarise students with a wide range of methodological approaches used to understand consumer behaviour. The course content is not limited to consumer behaviour research only, as the various techniques taught can be applied to research on other fields such as social psychology, educational psychology, organisational behaviour, and hotel management & tourism. Lectures on various research methods and data analysis techniques will be delivered using published papers as examples. There will be opportunity to practise the learned data analysis methods together using datasets from other published papers. Additionally, the course will expose students to academic journal papers on psychology and marketing. This approach will help students understand the relationship between theory building and theory testing with the use of empirical data.

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### **MKTG6006 Empirical Marketing Models**

This module covers empirical models and structural modelling in marketing and new empirical industrial organization (NEIO) and provides students with deep understanding of data analysis and modelling issue in marketing and NEIO. It includes empirical models on the analysis of scanner panel data at individual or household level as well as aggregate data at store, account, market, regional or national level. The topics include brand choice, category choice (purchase incidence), store choice, purchase quantity, and purchase timing, relating to the various consumer decisions (where to buy, whether to buy, what to buy, and how much to buy), either separately or jointly. It also covers learning, forward-looking behaviour, search models, NEIO models (the BLP approach and counterfactual experiments). Estimation methods include MLE, GMM, and SMLE. All topics are empirical in nature. Data and basic Gauss and SAS code are provided for the models covered. Relevant readings are also provided. Students are required to work with raw data, cleaning the data, writing their code, estimating the models, and writing reports.

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### **MKTG6007 Structural Models and Empirical Methods**

This course focuses on empirical structural models and their applications in Marketing, Economics, and Information Systems. The course covers theories, numerical methods, and applications of

empirical structural models. The topics include static discrete choice models, demand estimation using aggregate data (BLP), single-agent dynamic discrete choice models, static and dynamic discrete games, and their applications (e.g., storable and durable good demand, price discrimination, product innovation, two-sided platforms, and sharing economy). The course also covers research methodology related to computational methods (e.g., function approximation, numerical integration) and econometric analysis.

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### **MKTG6008 Empirical Methods in Business: Modeling and Estimation**

Applied research in business typically consists of four key components – research questions, data, model, and estimation. Researchers first have to understand what type of data to collect with the purpose of addressing specific research questions. Then they have to understand the data generation process and limitations in the collected data. Based on that they have to decide what is the appropriate model and what are the appropriate econometric methods to be applied to the data, hence the estimation results will be useful in addressing the research questions. This course will focus on simple models and the identification of causal effects from data and advanced modeling and estimation techniques that are required to deal with complicated data and research questions.

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### **MKTG6009 Field Experiments**

This course provides an in-depth exploration of field experiments and A/B testing, focusing on their design, implementation, and analysis. Students will learn both the theoretical foundations and practical applications of these experimental methods in various fields such as economics, marketing, and social sciences.

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### **STRA6014 Research Seminars in Strategic Management I**

This doctoral seminar introduces students to the foundations and applications of major theories used in strategic management and organization theory. The materials covered represent a blend of classic pieces to understand the core assumptions and historical roots of influential management theories, along with recent cutting-edge developments. Each theory or perspective discussion will be divided into two parts – foundations and applications. We will look at seminal articles of each theory as well as recent articles related to its applications in the fields of strategic management and organization theory. The articles within each topic incorporate a variety of approaches, giving us an opportunity to explore different ways of pursuing answers to important issues in strategy research.

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### **STRA6015 Research Seminars in Strategic Management II**

This doctoral seminar covers advanced topics on strategy and international business (IB), with a focus on critical review of their theoretical foundations and substantial issues. Seminar topics include: state of strategy and IB research, transaction cost economics, relational exchange theory, resource-based view, competitive force framework, institutional theory; strategic orientation, organisational learning, product innovation, interorganisational relationships, international

business, and emerging markets. The emphasis will be on critical review of most recent theoretical advances and development of new theoretical models.

Remarks: This course is to replace BUSM6015 from 2018-19

Prerequisite: STRA6014

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### **STRA6016 Organizational Economics and Business Strategy I**

This course is the first of the two-course sequence of organizational economics for doctoral students. The two courses will prepare research students for further study in organizational economics as well as related areas such as institutional economics, business strategy and human resource management, corporate finance, and innovation and entrepreneurship. In this course, we will cover a wide range of theoretical models and empirical studies based on the classic papers and some recent research. We place emphasis on the understanding of real-world phenomena and the combination between theory and empirics.

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### **STRA6017 Organizational Economics and Business Strategy II**

This course is the second of the two-course sequence of organizational economics for doctoral students. The two courses will prepare research students for further study in organizational economics as well as related areas such as institutional economics, business strategy and human resource management, corporate finance, and innovation and entrepreneurship. This is a seminar-based course and is organized around student presentation, class discussion, and faculty supervision. A list of topics and related research papers will be provided at the beginning of the semester.

Prerequisite: STRA6016 or special approval from course instructors

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### **STRA6018 AI, Organization, and Business Strategy**

This course explores the economic implications of Artificial Intelligence (AI), focusing on how it reshapes technology and innovation, knowledge utilization, coordination and incentives, firm organization, and market competition. Viewing AI as a technology that not only enhances productivity but also relaxes human constraints, we examine its impact on the production and diffusion of knowledge and how it alters coordination, incentive structures, and decision-making within firms. Furthermore, we analyze AI's effects on market structure, employment, economic dynamics, and the potential need for policy responses. We combine economic theory and rigorous empirical studies to understand these changes.

Prerequisite: STRA6016 or Master-level Microeconomics and econometrics or the equivalent (subject to instructor approval)

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## **STRA6019 Organization Theory**

This elective course focuses on organization theory surveying several areas, sometimes denoted with the term “paradigms” or perspectives. This course will cover the main theoretical perspectives on organizations and their environments, e.g., institutional theory, organizational ecology, and some latest developments in that domain, i.e., status, categories. Although the seminar is focused on the area of organization theory, the underlying theoretical ideas are general enough to have applicability in other domains of social science.

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# Courses offered by the Master of Economics programme