

DESCRIPTION FOR UNDERGRADUATE COURSES OFFERED BY SCHOOL OF BUSINESS (4-YEAR CURRICULUM)

The courses listed below may not be offered every year.

INTRODUCTORY LEVEL COURSES

ACCT1101. Introduction to financial accounting (6 credits)

The course will cover the principles of double entry book-keeping, the interpretation of financial statements, the issues raised by corporate regulation, and the use of management information for decision making.

ACCT1112. Professional preparation programme (6 credits)

To prepare students for a career in professional accounting, this optional semester-long course provides seminars/workshops on career opportunities, professional ethics, and develop interpersonal, communication and time-management skills, as well as social events offering opportunities to interact with accounting and business professionals. Pass/Fail grade.

IIMT2601. Management information systems (6 credits)

This course covers key concepts associated with management information systems: digital economy, e-commerce, information technology infrastructure, technology-business integration and the impact of technology on society. Case studies and lectures will be used to shed light on these topics. Students will also acquire hands-on knowledge and techniques using business software to practice formulating and solving business solutions.

MGMT2401. Principles of management (6 credits)

This introductory course traces the evolution of the study and practice of management over this past century, with particular focus on the landmark discoveries and lessons learned. The course aims to develop students' awareness of the nature of management processes and focuses on the following topics: planning, organising, controlling, leading, communication and change management. The programme's pedagogical design combines theoretical conceptualisation with interactive discussions, skill-building experiential exercises and students' presentations.

MKTG2501. Introduction to marketing (6 credits)

This course focuses on introducing core principles of marketing and covering key marketing concepts and processes such as managing customer relationships, marketing planning, understanding customers, competitors and marketplace, and developing marketing strategies (segmentation, innovation, and positioning) and marketing programs (products/services/branding, pricing, channel, and marketing communications). The course will be delivered via a blend of interactive class discussions, case analyses, and a group project on a new product/service development.

ADVANCED LEVEL COURSES

ACCT2102. Intermediate financial accounting I (6 credits)

The course provides an in-depth knowledge of the first part of financial accounting. It covers the environment of financial accounting and the development of accounting standards; the conceptual framework underlying financial accounting; statements of income and retained earnings; balance sheets; accounting and the time value of money; cash and receivables; valuation of inventories; acquisition and disposition of property, plant and equipment; depreciation and depletion; intangible assets; current liabilities and contingencies; long-term liabilities; temporary investments and long-term investments; and revenue recognition.

Prerequisite: ACCT1101 Introduction to financial accounting

ACCT2105. Introduction to management accounting (6 credits)

The theory and techniques involved in serving the accounting needs of management in decision making, control, evaluation and motivational aspects.

Prerequisite: ACCT1101 Introduction to financial accounting.

ACCT3103. Intermediate financial accounting II (6 credits)

This course provides an in-depth knowledge of the second part of financial accounting. It covers stockholders' equity; dilutive securities and earnings per share calculations; accounting for income taxes; accounting for pensions and postretirement benefits; accounting for leases; accounting changes and error analysis; statements of cash flows; basic financial statement analysis; and full disclosure in financial reporting.

Prerequisite: ACCT2102 Intermediate financial accounting I

ACCT3106. Management control (6 credits)

A course on advanced problems in managerial accounting and management information and reporting systems for planning and control of operations. Particular attention will be given to problems associated with large decentralised companies – divisional performance control, measurement and evaluation, and transfer pricing.

Prerequisite: ACCT2105 Introduction to management accounting

ACCT3107. Hong Kong taxation (6 credits)

This course provides students with a fundamental understanding of the current law, principles and practices of Hong Kong taxation. The concepts introduced in the course are heavily used in practice. The course is helpful not only for personal tax compliance and planning but also for paving the way for students to enter their future profession and the business world.

Prerequisite: ACCT1101 Introduction to financial accounting

ACCT3109. Auditing (6 credits)

Professional ethics and the social and legal responsibilities of auditors will be covered, as will basic auditing concepts and principles; evidence; evaluation of internal control; and standard procedures and methods of investigation.

Prerequisite: ACCT3103 Intermediate financial accounting II

ACCT3111. Corporate governance and social responsibility (6 credits)

In this course, students learn about the complex responsibilities facing business leaders today. They will explore the use of accounting information and internal control in ensuring efficient and effective operations, reducing the cost of capital, production and distribution, and complying with legal, regulatory and corporate oversight requirements. Students will also learn about ethics and governance systems that leaders can use to promote socially responsible conduct by organisations and their employees, and how personal values can play a critical role in effective leadership.

Remarks: This course is available to FBE students only.

ACCT3112. Accounting data management and analytics (6 credits)

This course is about descriptive and predictive analysis of data as it pertains to accounting and finance professionals.

In the era of “big data,” the volume, pace, and complexity of data have made it difficult to understand and use data. At the same time, the explosion of data has brought many opportunities for firms to get deeper insights into many aspects of their businesses. To harness excessive information, data analytics has become a must-have skill for all business managers and particularly accountants who often know both internal and external data, better than their counterparts in other areas of the business. This course will prepare students with fundamental analytics skills focused on accounting applications. Students will also gain hands-on experience with data analysis.

Students should be aware that this is not a computer-skills course. However, it does require extensive use of the computer as a tool which is expected for business analytic positions in the industry. Students will spend significant portion of their time learning and using computerized information systems and data analysis platforms. Some class assignments will involve the use of computer software.

This course is composed of two parts. In the first part, students will first be exposed to why analytics is important in accounting professions and learn about how financial and accounting data is generated and stored in modern Accounting Information Systems (AIS). Students will learn to build queries to pull data from AIS or databases, learn to perform descriptive analytics using various data visualization techniques, and identify potential problems and relevant issues. In the second part, students will learn about entry to medium level predictive accounting models and their practical applications such as performance forecasting and credit scoring. Students will learn to use a statistical computing software (R) to perform the analysis.

Pre-requisites: STAT1602/STAT0302 Business Statistics; *and*
ACCT3103 Intermediate Financial Accounting II

ACCT3113. Accounting theory (6 credits)

This course covers the development and structure of accounting theory, income determination, asset valuation, special areas of controversy including social accounting and accounting for inflation, and the principles of human information processing.

Prerequisite: ACCT3103 Intermediate financial accounting II

ACCT3114. Valuation using financial statements (6 credits)

The purpose of this course is to introduce students to the concepts of financial statement analysis, aiming to provide students the basic skills and techniques to analyze financial statements for the application of valuation. Students will learn how to evaluate accounting quality, firms' financial performance, and how to evaluate financial statements and perform rudimentary prospective and equity analyses. Students will acquire knowledge on how to recast and adjust financial statements to

estimate the intrinsic value of the firm. Last students apply the knowledge and gain hand-on experience through group projects on financial statement analysis.

Prerequisites: ACCT1101 Introduction to financial accounting; *and*
ACCT2102 Intermediate financial accounting I

Mutually exclusive: FINA3321 Financial statement analysis

ACCT4104. Advanced financial accounting (6 credits)

This course looks at the application of accounting theory to the preparation of accounting standards and their implications for reporting purposes, particularly those related to the consolidation of group accounts, asset valuation and the influence on income determination. Other topics may include current cost accounting, income tax allocation, government entities and non-profit organisations.

Prerequisite: ACCT3103 Intermediate financial accounting II

ACCT4108. Advanced topics in auditing (6 credits)

This course extends the first Auditing course to further examine various advanced topics including advanced auditing techniques, auditing for operations and efficiency, auditing web based information, EDP auditing, environmental auditing, forensic accounting and contemporary issues of auditing.

Prerequisites: ACCT3109 Auditing; *and*
ACCT4104 Advanced financial accounting

ACCT4110. Advanced topics in taxation (6 credits)

This course provides students with a thorough and in-depth knowledge of the current law, principles and practices of Hong Kong taxation. Students are required to apply tax principles, decided cases and legislation to compliance matters and tax planning activities in Hong Kong. The course also covers anti-avoidance provisions, cross border activities and international tax planning considerations. The concepts introduced in the course are heavily used in practice. The course is helpful not only for tax compliance and planning but also for paving the way for students to enter their future profession and the business world.

Prerequisite: ACCT3107 Hong Kong taxation

ACCT4114. Accounting seminar (6 credits)

A course on (a) the nature of accounting theory and research and (b) topical accounting issues.

Prerequisite: ACCT3103 Intermediate financial accounting II

BUSI1802. Advanced business communication skills (6 credits)

This course focuses on building on the strengths and sharpening the skills that second year students have acquired in the first year course Business Communication. The course aims at helping students develop their business communication skills for a variety of workplace situations. In addition to learning the principles and skills, students are expected to identify and make effective use of in-class and out-of-class practice opportunities.

BUSI1805. International field trip (6 credits)

This course, a required course for BBA(IBGM) Year 1 students, aims to provide an opportunity for students to gain international exposure and global perspectives. Each year a country /countries with emerging international business opportunities will be selected as the field trip destination. Cultural activities and firm visits will be arranged during the trip to arouse students' awareness of cultural diversity and enhance their understanding of how cultures impact business practices in the country /countries. Based on the research theme of the year, students will conduct business research and make presentations on the issues related to international business and global management during the semester.

Remarks: For BBA(IBGM) students only.

BUSI2811. Negotiation and conflict resolution (6 credits)

This course aims at providing a systematic introduction of concepts, theories and practices, with a focus on equipping students with toolkits for handling conflict and negotiation. The course is composed of two intimately related parts. The first part introduces the nature and types of conflict, mechanism of conflict escalation and de-escalation, and conflict resolution styles. The second part covers the characteristics of interest-based negotiation and negotiation strategies. Students will learn strategies to avoid various cognitive biases in conflict situations and negotiation, the building blocks of negotiation, the differences of distributive versus value-creating negotiation approaches, the strategies of achieving integrative outcomes, building trust and controlling emotions, how to utilise power and persuasion, and the importance of non-verbal communication in gaining information and ethics. Some topics will also be covered in the context of cross-cultural negotiation and computer-mediated negotiation to cater to the needs of today's international business environment.

BUSI2812. Social venture management internship course (6 credits)

This experiential learning course will give students an opportunity to work directly for social ventures in management level roles under the guidance of a faculty instructor and professional mentors. You will have opportunities to manage teams, solve real-life problems, and gain hands-on business experience, which will strengthen your soft skills, help you implement academic business concepts in a practical way, and greatly improve your ability to compete in the job market.

BUSI2813. Field experience in China business environment (6 credits)

This course aims to provide experiential learning in China business and the economy for year 1 or year 2 students in the Faculty of Business and Economics. Students will spend two weeks in Shanghai, attending classes and guest lectures as well as visiting representative companies in important industries and sectors there. The course will focus in the practical aspects of China business environment covering both manufacturing and servicing sectors. By going through topics/issues of recent concern, obtaining strategic insights via firm visits and attend sharing by senior management people, students are expected to acquire in-depth knowhow of learnt topics. The structure and content of the course is designed to align and integrate with other Faculty courses on China business and economy by focusing in the latest business environment in China.

BUSI2814. Business ethics (6 credits)

Global business today has powerfully reinforced the importance of ethical behavior, especially for managers and leaders. Now more than ever, the eyes of corporate stakeholders are on business leaders, and ethical standards are being enforced. It is also important for companies to consider their duties to

society and a sustainable business environment. Diverging theories of Corporate Social Responsibility (CSR) and methods for contributing to society, provide companies with a variety of options for their social impact. Taken together, it is imperative for all current and future leaders to understand clearly what business ethics and CSR entail, and have the tools to make proactive decisions when the need arises.

The purpose of this course is to help you understand the role of ethics and CSR in business administration in a complex, dynamic, and global environment. We will work together to develop the tools necessary to face complex ethical situations, where action often must be taken quickly and under considerable pressure. Business leaders cannot avoid making difficult ethical decisions, and any future leader must be ready.

The goal of this course is not to explain the difference between right and wrong. In this course we will provide a broad view of life in business, and practice identifying the ethical and social dimensions embedded in everyday business decisions. Further, we will seek to gain clarity both on our own values, and the psychological/environmental factors that influence ethical behavior.

The study of ethics is actually more of conversation about human interaction and interconnectedness than it is an exact, quantitative science. In discussing ethics we will explore areas such as law, accounting, finance, employment, corporate structure, and organizational behavior. This conversation is necessary to shape and sometimes even counterbalance the more quantitative and amoral aspects of business and economics education.

BUSI2815. Managing communication through social media (6 credits)

Students will learn current research and theories in the field of social media while honing their communication skills in this medium.

Teaching and learning tools used to achieve better learning outcomes include online discussions exploring current research and theories, class lectures and discussions, videos, and student-driven communications on Moodle and other “test” sites.

Students in this class are expected to be prepared for class discussions regarding readings, cases and online discussions, and participate both in class and online as is suitable for a social media course. A successful learning experience depends on contributions from both the instructor and the students. Full and active participation is critical for achieving the optimal learning outcome.

BUSI2816. Transformative business immersion in developing economies (6 credits)

This course is a five-week total immersion experience into unfamiliar geography, economy, sociality and environment. After a one-week preparation period, students will travel to a pre-selected location where they will immerse themselves in the daily economic lives of individuals in the community, quickly working to pinpoint possible inefficiencies, weaknesses or stresses in the business processes, relationships, and economic models in the small community. You will be living with local families in a homestay arrangement, allowing you to more quickly understand the local culture, customs and business practices.

During the course, the students' task is twofold: first, students will immerse themselves in the daily economic lives of individuals in the community, quickly working to pinpoint possible inefficiencies, weaknesses or stresses in the business processes, relationships, and economic models in this small community. Second, armed with knowledge gained in university and a vastly different perspective from your new friends, you will work cooperatively with the local business and community leadership to come up with innovative approaches to these issues.

This course is designed to be mutually beneficial to both the students and to the families and community where they live, and with whom they share experiences during the length of the course. Through all of this, students will gain experience in the practical application of business theory, will forge new friendships with people they would never otherwise meet, will gain a greater appreciation for the constraints and limitations in the development of rural places, and will hopefully make a lasting difference in the lives of newfound friends.

BUSI3801. Business law (6 credits)

An introduction to the Hong Kong legal system, the fundamentals and general principles of Hong Kong law, and other legal concepts which a manager may be expected to encounter in the business environment.

BUSI3803. Company law (6 credits)

This course covers the formation of companies; memoranda and articles of association; powers and duties of directors, secretaries and auditors; shareholders' rights and powers and the role of the courts; takeovers, mergers and investments; statutes, regulations and codes; and insolvency law and practice.

BUSI3808. Global analysis team project (6 credits)

The primary objective of this course is to develop students' capacity to understand global strategic issues from business, economic, social, political and/or environmental perspectives. Students are also expected to devise viable alternatives for dealing with the key issues discussed. They will partner with students from overseas universities to work on a global analysis team project in their final year of study.

Remarks: For BBA(IBGM) students only.

BUSI3809. Leadership development programme (6 credits)

This course aims at enabling students to develop themselves as leaders of organisations and to embark on paths of personal leadership development. The following concepts will be covered: motivation, lifelong leadership development, personal leadership development plan, stress and adversity management, peer mentoring, group dynamics, work and life balance as well as purpose-driven leadership.

BUSI3810. Legal and ethical environment of global business (6 credits)

This course examines how law and ethics coincide with global business transactions today. It is specifically designed for students who hope to become leaders and executives in Asia. We will discuss broad legal principles and how they affect corporate strategy and operations, analysing several cross-border business transactions and court cases.

IIMT2602. Business applications development (6 credits)

This course introduces the basic concepts of programme development for business applications by covering the following topics: user interface design and development, database design and querying, and operating environments. Students will have an opportunity to have hands-on experience in selected application systems development.

Prerequisite: IIMT2601 Management information systems

IIMT2641. Introduction to business analytics (6 credits)

Online transactions, mobile applications, sensors, video-capturing systems and social media generate massive amount of data. In response businesses increasingly rely on quantitative techniques, statistical models and data mining methods to gain managerial and strategic insights from such data and thus enhance their competitive position. This course covers both technical and managerial aspects to provide a basic understanding of business analytics and show how it can be used by businesses to analyze their competitive posture more effectively, know their customers better and make better managerial and strategic decisions.

Prerequisite: STAT1602 Business statistics or STAT1603 Introductory statistics or STAT2601 Probability and statistics I or ECON1003 Analysis of economic data or equivalent

IIMT3601. Database management (6 credits)

This course introduces the principles of design, development and administration of database management systems in business, considering the user, developer, and administrator points of view. Students will learn the basic concepts involved in the design and management of databases in business applications, including database architecture, entity-relationship modeling, database normalization, structured query language, and database administration. Students will also acquire hands-on experience in designing and developing simple databases.

Eligibility: Students taking or having taken COMP3278 are not allowed to take this course.

IIMT3602. Information systems analysis and design (6 credits)

This course aims to develop an understanding of the concepts of systems analysis and design. Various system development methodologies will be elaborated and discussed. CASE tools will be used to illustrate how to construct a variety of system design documents. The course will use a combination of lectures, laboratory sessions, assignments, and projects.

Prerequisite: IIMT2601 Management information systems

IIMT3603. Project management (6 credits)

This course focuses on the planning, scheduling, control, and evaluation of project management. The basic tools and techniques of project management will be explored, with special emphasis on engineering, management, and control of IS/IT related business projects. The evaluation of projects and project management will also be addressed, as will scope, time, cost, quality, human resources, communications, risk, and procurement.

Prerequisites: ACCT1101 Introduction to financial accounting; *and*
ECON1210 Introductory microeconomics

IIMT3604. Telecommunications management (6 credits)

This course introduces telecommunications and computing networks used in the support of business activities. Topics include data, voice, image and communication technologies; networking and communication architectures; and protocols and standards.

Prerequisite: IIMT2601 Management information systems

Eligibility: Students taking or having taken COMP3234 are not allowed to take this course.

IIMT3621. Creativity and business innovation (6 credits)

Today the efficient and cost-effective provision and deployment of resources no longer guarantee sustainable advantage. Instead, a firm's competitive advantage is increasingly tied to its workforce's ability to think outside the box, and leverage fleeting opportunities to innovate and market high-margin products and services.

This course aims to put students in a lateral mind-set where they can challenge the conventional wisdom to think creatively, see the unseen to uncover opportunities, and explore the trade-offs involved in managerial decisions to design elegant and articulated solutions.

Remarks: This course is not open to first-year students.

IIMT3622. Business transformation (6 credits)

Managers need to have special skills to survive in today's volatile, uncertain, complex, chaotic and accelerating world. The course builds on chaos theory to provide a roadmap for managers planning to transform their companies into an inter-networked enterprise where shared infrastructures are used to link customers, suppliers, partners and employees to create superior economic value. It covers business strategy, infrastructure, process management, and integration and implementation. The course is based on the premise that integrating Internet technologies throughout the value chain is crucial in building and managing customer relationships and thus brand equity.

Prerequisite: IIMT2601 Management information systems

IIMT3623. Design thinking: concepts and applications (6 credits)

Design methodology is closely related to the innovation process within different business contexts. This course aims to develop students' design mentality and skillsets through idea conceptualisation, concept development, process, implementation, and project planning and management.

Case studies will be examined to understand where and why creative designs are incorporated in different industries, taking into account respective historical backgrounds and theories.

Studies of innovation will cover architectural and product designs; sales, marketing, and branding; and change management. Students will be challenged to take a cross-disciplinary approach to creatively achieve business, social and communal goals in their group projects.

Co-requisite: IIMT 3624 Design studio

Remarks: This course is available to FBE students only.

IIMT3624. Design studio (6 credits)

This is a complementary course to IIMT 3623 and offers problem-based studios to mimic the core learning process in professional design education. Design topics will serve as the media for students to explore concept and project development.

The aim of the course is to get students to think and work through a comprehensive process in their hands-on projects. While striving to achieve business and social goals, students will be trained to utilize the hybrid viewpoints of analysts and creative designers to evaluate the nature of projects, their functions, and short-term and long-term impacts on different stakeholders.

Students will also learn to develop solutions through hands-on experiment and staged workshops,

simulating the professional creative industry. They will develop their own authentic style in leadership and problem-solving skills, supported by visual communication and graphical techniques.

Co-requisite: IIMT 3623 Design thinking: concepts and applications

Remarks: For students in BDI majors only.

IIMT3626. Values-driven innovation (6 credits)

This course provides a platform for critical rethinking of the role of business in creating both business value and social values. It examines the business building blocks to explore win-win situations where economic success and societal benefits co-exist through innovative thinking and solutions, taking into account related trade-offs. Students will learn how to design businesses that can respond to increasing demands for a fairer and better society, a greener environment and greater work-life balance, whilst reducing costs, building customer loyalty, and attracting and retaining talents, thus creating long-lasting value.

IIMT3635. Operations management (6 credits)

Effective operations management involves managing people, equipment and other resources. This course covers a set of techniques that were designed to help people understand and improve administrative, manufacturing, product design, or service operations processes. Students will learn process analysis, management of process variability and its impact, process improvement with statistical tools, and applications in lean operations, using case discussion, in-class interactions, and hands-on projects.

IIMT3636. Decision and risk analysis I (6 credits)

Business decision-making involves considerable complexity and uncertainty. This course introduces the basic concepts in quantitative business analysis to help students gain a clear understanding of the key elements in the decision making process. This course covers the tools and the skills to analyze and solve problems by stressing approaches to 1) understand and question assumptions, 2) consider a richer set of solution alternatives, and 3) consider diverse measures of performance. The teaching methods will include lectures, skill-building exercises, qualitative class discussions, and a project.

Prerequisite: STAT1602 Business statistics *or* STAT1603 Introductory statistics *or* STAT2601 Probability & statistics I *or* ECON1280 Analysis of economic data *or* equivalent

IIMT3637. Decision and risk analysis II (6 credits)

Managers need to understand and promptly react to business risks and uncertainty. This course introduces sophisticated quantitative models and advanced tools such as discrete and continuous time Markov chains, renewal processes and other stochastic models to capture randomness in business processes. Students are expected to learn these mathematical models through lectures, skill-building exercises and qualitative class discussions.

Prerequisite: IIMT3636 Decision and risk analysis I

IIMT3661. Decision support and expert systems (6 credits)

This course explores a range of modern technologies used to support business decision making. Topics include decision support systems, group support systems, electronic meeting systems, artificial intelligence, expert systems, and neural networks. Both technical and managerial issues related to the development and implementation of decision support systems will be discussed.

Prerequisites: IIMT2602 Business applications development; *and*

IIMT3601 Database management *or* equivalent

IIMT3662. Advanced database management (6 credits)

The course consists of two parts. The first part covers advanced database concepts such as views, triggers, stored procedures, SQL*Plus, database administration and performance tuning. The second part examines various techniques in data mining such as decision trees, neural networks, and clustering. Students will learn about the applications of these techniques in business.

Prerequisite: IIMT3602 Database management *or* COMP3278 Introduction to database management systems

IIMT3663. Internet and mobile applications (6 credits)

In this course students will learn how to develop Internet-based and mobile business applications using the resources, tools and services available on the Internet. Topics include HTML, Java applets, HTTP and CGI, JavaScript, Java Servlets and JSP, PHP, ASP, Web spiders and search engines, and mobile applications.

Prerequisites: IIMT2602 Business applications development *or* COMP1117 Computer programming I *or* ENGG 1111 Computer programming and applications *or* equivalent; *and*
IIMT3601 Database management *or* COMP3278 Introduction to database management systems *or* equivalent

IIMT3664. Telecommunications policy (6 credits)

This course provides an overview of recent developments of the telecommunications industry in Hong Kong and around the Asia-Pacific. Telecommunications infrastructure policies introduced by respective governments in the region and the impacts of these policies on business operations will also be examined.

Prerequisite: IIMT2601 Management information systems *or* equivalent

IIMT3665. Information systems security management (6 credits)

This course focuses on key issues related to security management of Internet-based business applications. Students will learn how to evaluate and implement measures to protect an organization's information systems from various security threats and vulnerabilities. Topics to be covered include security policy, information security management, information technology governance, risk assessment and management, and security control.

Prerequisite: IIMT2601 Management information systems *or* equivalent

IIMT3666. Current topics in information systems (6 credits)

This course discusses contemporary issues in information systems, including emerging technologies and the ways they affect businesses.

Prerequisite: IIMT2601 Management information systems *or* equivalent

IIMT3667. Information systems strategy (6 credits)

This course examines various issues related to the management of information systems in

organisations. The link between information systems planning and business strategy will be explored to see how companies can use information systems not only to support their daily operations but also to sustain and enhance their strategic advantage.

Prerequisite: IIMT2601 Management information systems *or* equivalent

IIMT3668. Multimedia applications development (6 credits)

This course introduces various technologies and methods used in the design and development of multimedia applications in digital media industry. Students will learn how to develop interactive multimedia applications that use audio/video and 2D and 3D graphics. Related concepts including human-computer interaction, graphics design, and managing multimedia projects will also be covered.

Prerequisites: IIMT2602 Business applications development; *and*
IIMT3601 Database management *or* equivalent

IIMT3681. Supply chain management (6 credits)

The course introduces students to concepts, strategies, and technologies related to supply chain management. The course focuses on the systems approach to planning, analysis, design, development, and management of supply chain. Using cases and real-life projects, students will learn how to use appropriate information technologies to synchronize supply chain processes, thus reduce costs and improve service.

Prerequisite: IIMT2601 Management information systems *or* equivalent

IIMT3682. IT and entrepreneurship (6 credits)

This course introduces students to the core concepts of entrepreneurship with a special emphasis on entrepreneurial settings involving the use of information technology. Students will be exposed to the key processes, challenges, risks and rewards of starting up an entrepreneurial business. They will also learn to apply the concepts and knowledge learned in the course to develop a business plan that could be presented to potential investors and venture capitalists.

Prerequisites: IIMT2601 Management information systems; *and*
MGMT2401 Principles of management

Mutually exclusive: MGMT3415 Principles of entrepreneurship

IIMT3683. Enterprise resource planning systems (6 credits)

This course provides an overview of enterprise resource planning systems and their use in the business environment. Topics include business processes management, functions and data requirements, and systems implementation and integration.

Prerequisite: IIMT2601 Management information systems

IIMT3684. Web and social media technology (6 credits)

This subject explores the emerging and revolutionizing role of the World Wide Web for marketing practice. A number of techniques for advertising over the Internet will be introduced. Students will explore the potential of advertising through Web technologies such as blog marketing, social media marketing and advertising, search engine marketing, search engine optimisation, email marketing, usability testing and website measurement. After completing this module, students will be able to develop an Internet marketing plan integrating social media tools and search engine use for advertising on the Internet.

IIMT3685. e-Commerce (6 credits)

This course focuses on business opportunities brought about by the Internet. Students will learn how to use web-based technologies to set up a business.

Prerequisite: IIMT2601 Management information systems

IIMT3686. Information systems audit and control (6 credits)

This course is designed to provide an overview of computer information systems auditing and control, and their application in the business environment. It is intended for general business students. Topics include the information systems audit process, information technology governance, systems and infrastructure lifecycle management, information systems auditing methodology and information security policy, information technology service delivery and support, computer-assisted audit tools and techniques, protection of information assets, as well as disaster recovery and business continuity planning.

Prerequisite: IIMT2601 Management information systems

IIMT3688. Artificial intelligence in business (6 credits)

This course focuses on the fundamentals of artificial intelligence (AI), with emphasis on business applications. Students will gain hands-on experience in developing and using different AI tools to solve real-world business problems. Topics include AI algorithms, intelligent agents, document management, expert systems, and data mining.

Prerequisites: IIMT2602 Business applications development or COMP1117 Computer programming I or ENGG1111 Computer programming and applications or equivalent; and
IIMT3601 Database management or COMP3278 Introduction to database management systems or equivalent

IIMT3690. Information systems practicum (12 credits)

This 12-credit experiential course provides a practical platform for students to apply their information systems knowledge in the real world. Under the supervision of a company executive and a professor, students will work in a company on a full-time basis for a minimum continuous period of six months.

Prerequisite: IIMT2601 Management information systems

Remarks: The course is only open to students taking a major or minor in Information Systems. Registration in this course is subject to the approval of the course coordinator who will try to place students in a company. Alternatively, students can identify a company willing to employ them, but they need to seek the approval of the course coordinator beforehand.

IIMT4601. Information systems project management (6 credits)

This course examines the concepts, techniques, and activities related to information systems development projects. Teams of students will carry out projects that span the entire information systems analysis and design life cycle, including planning and scheduling, cost estimation, risk analysis, team organisation, process management and quality assurance. In the process students will become familiar with the use of computer-based tools and managerial techniques used in information systems development projects.

Remarks: This course is only available to final year students with a major in Information Systems.

MGMT3403. Leadership (6 credits)

This course deals with leadership in organisational contexts. Students will learn about major theoretical approaches to studying leadership. Students will also examine leadership in problem situations. Cases and assessment exercises will be used to help students develop leadership competencies.

MGMT3404. Cross-cultural management (6 credits)

The trend of globalisation in business requires organisational members, especially managers, to work effectively with international assignments, to collaborate with cross-cultural teams, and to manage the increasingly diverse workforce, business partners, customers and clients. Therefore, managers need to acquire unique cultural competencies that go beyond traditional managerial competencies. The main objective of this course is to provide students with a solid basis for developing such cultural competencies, so they can understand the challenges that might occur while working abroad and the principles of effective cross-cultural management. The course aims to develop an understanding of key cultural differences, and how these differences influence the management of individuals, teams, and organisations.

MGMT3405. Organisational behaviour (6 credits)

A course on the concepts and key research findings which can help us to understand human behaviour in organisations. Topics include motivation, leadership theory, group dynamics, morale, communications, control techniques and organisational culture.

MGMT3415. Principles of entrepreneurship (6 credits)

This course equips students with the essential elements of entrepreneurship manifested in the issues, challenges and rewards of creating a new business. The process in creating a start-up company, indeed, the process of an entrepreneurial undertaking, will be examined, discussed and practiced in class in order to provide students with some first-hand knowledge and experience in the subject matter. The course also covers social entrepreneurship and corporate entrepreneurship / entrepreneurship within the corporation.

Mutually exclusive: IIMT3682 IT and entrepreneurship

MGMT3426. Employment and labour relations (6 credits)

This course intends to give an overview on the fundamentals of labour relations theories pertaining to trade unionism, collective bargaining and workplace labour-management relations. Particular attention is also given to the development of the labour market, employment pattern and labour law in Hong Kong.

MGMT3429. Strategic human resources management (6 credits)

This course proposes to look at the basic concepts of human resources management (HRM) and its application to Hong Kong. Emphasis will be placed on the strategic linkage between HRM and corporate management in the context of business change and re-structuring. Comparative references will also be made to practices in other industrial societies.

MGMT3433. Organisational change and development (6 credits)

The objective of this course is to explore the problems and issues involved in the management of organisational change and development. Major approaches and attempts to conceptualise the phenomenon will be examined in a critical manner. Particular attention will be paid to problems arising from company formation, entrepreneurial ventures, company expansion and growth, maturity and bureaucratisation, corporate failure and recovery. Major strategies for change will be examined.

MGMT3434. Human resources: theory and practice (6 credits)

A course that draws upon an understanding of organisational behaviour to examine the techniques and practice of HRM. Topics include HRM and corporate strategy, human resource planning, recruitment and selection, performance management, training and development, and employee relations.

Prerequisite: MGMT2401 Principles of management

MGMT3435. Production and operations (6 credits)

A course to introduce a systems-oriented view of production and operations management.

Prerequisites: MGMT3423 Operations and quality management; *and*

IIMT3636 Decision and risk analysis I

MGMT3447. Applied organisation (6 credits)

This is a course on the design of high performance organisation in the modern world. Topics include management structures of control and co-ordination, high-commitment work systems, design of compensation systems, virtual organisation and the use of IT, organisational learning, organisational change, organisation for cultural synergy, and organisation of international companies.

MGMT3457. High-performance work systems (6 credits)

This course examines the principles and practice of designing and operating systems of work that combine the optimum use of technology with high performance and motivation. Topics include socio-technical systems analysis, teamwork and networking.

MGMT3458. Human resource planning and career management (6 credits)

This course aims to provide an understanding of how the demand and supply of human resources can be brought into balance, and people already in employment can be helped to develop in their work careers. Topics covered include appraisal, counselling, development and training, and career planning. Ways in which HRM managers can facilitate organisational learning are also examined.

MGMT3464. Leadership workshop (6 credits)

This workshop will explore key processes of leadership experientially in a simulated political, social and business environment. The purpose is to provide students with knowledge in leadership theories, models and frameworks, with opportunities to experiment with natural and new leadership behaviour in a simulated context. Having gone through these processes in a collective, multi-staged exercise, there will be opportunity for reflection, sharing of experience and integration of practice with theories, in the presence of facilitators.

MGMT3470. Reward and compensation (6 credits)

This course addresses the design of reward and compensation systems and the contribution they can make to the attainment of an organisation's strategic objectives. Among the specific techniques covered are job evaluation, design of incentives, performance-related pay, and non-monetary rewards.

MGMT3472. Team building programme (6 credits)

The objective of this workshop is to explore key aspects of group dynamics through a process of experiential learning. The aspects that we shall be considering include leadership and communication, planning and organising, decision-making and problem solving, and trust and team building in the context of business and management. The activities you will undertake consist of a series of problems to be resolved through the combined efforts of your group members. The problems are physical in nature, rather than hypothetical and cognitive, and require the application of organisational skills for successful and efficient solutions.

MGMT3475. Current topics in human resource management (6 credits)

This course focuses on current topics in managing a firm's human resource management functions. In-depth classroom discussion, management cases and applied business projects will be emphasised.

MGMT3476. Managing organisational change (6 credits)

Business organisations face unprecedented challenges today and managing change has become a crucial factor in their survival and performance. This course introduces the specialised topic of organisational change management. It provides students with an understanding of how organisational change is initiated and sustained.

Prerequisite: MGMT2401 Principles of management

MGMT3477. Selections and training (6 credits)

This course will focus on the basic concepts of selections and recruitment, training and development of different employees, and human resources utility analysis. In particular, students will be exposed to different recruiting processes and the whole spectrum of training and development techniques, and how they can add value to business success.

MGMT3478. Compensation and benefits (6 credits)

This course will focus on the basic concepts of pay and compensation policies for different employees. In particular, students will be exposed to fundamental pay and benefits administration, along with the importance of rewards and their impact on employee attraction, motivation and retention.

MKTG3501. Consumer behaviour (6 credits)

This course is designed to understand how customers behave. It integrates the psychological processes that motivate and direct consumers and organisations in their consumption decisions. Students will learn to apply concepts and measurement tools to managing firms in Hong Kong and Mainland China through exercises, cases and projects. Implications for marketing decisions will be shared.

Prerequisite: MKTG2501 Introduction to marketing

MKTG3502. Marketing research (6 credits)

This course will cover the broad principles of marketing research. Emphasis will be placed on the use of marketing research as an aid to decision making. In this spirit, students will be introduced to a variety of types of marketing research data. Students will be given the opportunity to engage in practical marketing research-based exercises.

Prerequisite: MKTG2501 Introduction to marketing

MKTG3511. Advertising management (6 credits)

The preparation, use and administration of advertising, emphasising the use of research to direct and measure the effectiveness of each stage in the operation, will be covered in this course.

Prerequisite: MKTG2501 Introduction to marketing

MKTG3512. Brand management (6 credits)

Why do companies need brands and how do they develop brands? Why do brands fail? Are there ways to manage brands so that they last? What are the challenges facing a brand manager? If you are interested in finding answers to these questions and prepared for hands-on learning of the brand development process, then this course is for you. Through theories and concepts, case analyses, problem sets, class debates and project assignments, this course aims to provide students with a capacity to think creatively and with increased precision about the strategies and tactics involved in building, leveraging, defending, and sustaining strong brands. To prepare students for the customer-driven marketing challenges facing a brand manager, this course draws insights from psychological, sociological, and anthropological theories of consumer behaviour.

Prerequisite: MKTG2501 Introduction to marketing

MKTG3513. Consumer insights for marketing decisions (6 credits)

This course focuses on current topics in managing a firm's marketing functions. Organised along a seminar mode, students will explore real life experiences and exposures to firms, together with in-depth intellectual challenges, through classroom discussion, the study of management cases and applied business projects.

Prerequisite: MKTG2501 Introduction to marketing

MKTG3514. Retailing (6 credits)

The objective of this course is to explore the problems and issues involved in the management of quality improvement and market competition. Emphasis will be on the strategic aspects of quality and marketing management, in particular customer value, quality improvement tools, quality concepts, and the relationship of quality with different aspects of marketing management.

Prerequisite: MKTG2501 Introduction to marketing

MKTG3522. China marketing (6 credits)

This course is designed to focus on selected topics that are of salience to managing firm marketing strategies and operations in Mainland China or Hong Kong. It may include but is not restricted to contemporary marketing issues related to branding, new product development, marketing high-technology products and customer relationship management.

Prerequisite: MKTG2501 Introduction to marketing

MKTG3523. Global marketing (6 credits)

This course shows how the basic principles of marketing can be applied to marketing problems across national boundaries and within foreign countries. Attention is paid to the development of global marketing strategies and to the different approaches needed to market consumer items, industrial goods and services internationally.

Prerequisite: MKTG2501 Introduction to marketing

MKTG3524. Internet marketing (6 credits)

This course examines the evolution of the World Wide Web as a powerful tool for selling, distributing and servicing goods and services. Particular attention will be paid to customer relationship management and its impact on the competitive positioning of a firm.

Prerequisite: MKTG2501 Introduction to marketing

MKTG3525. Services marketing (6 credits)

The course examines the characteristics of service organisations and how this affects their approach to marketing. Issues in the three dimensions of internal marketing, transactional marketing and external marketing are examined, and the role of research analysed. Attention is paid to service culture and service value and problems are illustrated by examples from Asian, American and European service firms.

Prerequisite: MKTG2501 Introduction to marketing

MKTG3526. Innovation and new product development (6 credits)

This course aims to help students gain an overall understanding of how to develop and manage innovations and new products. The course introduces theories of diffusion of innovations, determinants of successful and unsuccessful new products, and consumer perceptions of innovations and new products at different levels of innovativeness. Building on these theoretical perspectives, the course further introduces a systematic new product development (NPD) process from idea generation to commercialization and analyzes how the NPD process should be adapted according to different levels of product innovativeness. Students will learn and apply qualitative and quantitative techniques related to innovation and new product development and management in this course.

Prerequisite: MKTG2501 Introduction to marketing

MKTG3531. Strategic marketing management (6 credits)

This is a capstone course that integrates considerations in a firm's marketing decisions. It covers strategic market orientation, the allocation of resources and the effectiveness of marketing strategies. The course emphasises managerial implications for different types of firms. Students will learn how to apply the course contents through in-depth studies of firms, research projects and management cases.

Prerequisite: MKTG2501 Introduction to marketing

STRA3702. International business (6 credits)

This course examines the opportunities and challenges that contemporary managers confront when conducting business across national borders. It addresses the complex environment of international business with respect to economic, social, cultural, political, and legal institutions. Special attention will be given to examine how these institutions shape business operations in the global market. Emphasis will be placed on applying theoretical framework to analyse practical problems

confronting managers.

STRA3703. Multinational corporations (6 credits)

This course studies the multinational enterprise (MNE) and the theoretical approaches that have been formulated to explain the growth and operation of this form of business on an international scale. Recent general theories will be considered in a critical manner to allow judgments to be made on their strengths and limitations.

Prerequisite: MGMT2401 Principles of management

STRA3705. China economy (6 credits)

The course will examine the historical development of modern China and the emergence of new forces and ideologies in the recent past. This should provide a backcloth for the interpretation of the economic and social events of the present time.

Mutually exclusive: ECON2264 Economic development of China

STRA3706. China business environment (6 credits)

This course examines the opportunities and challenges that managers confront when doing business in China. It addresses the complex environment of China business with respect to economic, social, cultural, political, and legal institutions. It also aims to provide students with contemporary knowledge of the external environmental forces that are changing competition in today's China market. Threats and opportunities arising from the new rules in China will be discussed.

STRA3707. The European business environment (6 credits)

This course is intended for those who wish to study the evolution of the European business environment and the processes by which it operates. It investigates the broader political, cultural, economic, legal and philosophical basis of the business milieu mostly in Western Europe but with reference to the Eastern European states where appropriate. It also covers the typologies of businesses as conducted in selected states where the free market, remnants of state control and regional and global influences all have a part to play. Teaching is based on lectures, case studies and simulations, with visiting lectures from various consulates to enrich the content.

STRA3708. A century of business in Hong Kong (6 credits)

This course, taught in a series of lectures and tutorials, will explore the trajectory of European and Chinese business from the opening of Hong Kong as a free port in 1841 until the handover in 1997, complementing approaches of economic, social and political history.

STRA3709. Applications of strategic thinking in business (6 credits)

Strategic thinking is the science of decision making in a strategic situation, where people's optimal choices are interdependent because a decision's consequence depends on other people's choices. Almost all human choices are made in strategic situations and are therefore subject to the analysis of game theory. This course will introduce basic concepts and principles of game theory and their applications to a variety of real life business situations. The major contents include Prisoners' Dilemma and dominant strategies, simultaneous games and Nash equilibrium, randomised strategies, sequential games and backward induction, games under imperfect information, and repeated games and cooperation. The course emphasises examples and applications and does not involve heavy

calculation. As business competition shares a lot of similarities with military strategies, the principles of game theory will be further applied to shed light on the Chinese classic, *The art of war* by Sun Tzu. Mutually exclusive: ECON2214 Games and decisions

STRA3716. Competitiveness of Chinese Firms (6 credits)

This course will focus on the competitiveness of the economy and industries of Mainland China and examine China's competitiveness on a regional, industry and activity basis. Globalisation and China's accession to WTO have presented unprecedented opportunities and challenges for China's economy and industries. As such, China's position in the world economic system and its ability to move up the value-added ladder is critical to its sustainable economic development. Given Hong Kong's close links to the economy of the Chinese Mainland, China's economic future will heavily influence that of every industry in Hong Kong. Through detailed analysis of a cross section of Chinese industries, the course will help students to gain a better understanding of the current status of China's competitiveness and future dynamics.

STRA4701. Strategic management (6 credits)

The course will review the analysis and implementation of strategic corporate decisions which encompass all functional areas of business. Students will be split into small groups and will be required to write a mini-project of not more than 5,000 words outlining the desired corporate strategy for a given corporate problem.

Prerequisites: ACCT1101 Introduction to financial accounting; *and*
 ECON1210 Introductory microeconomics; *and*
 FINA1310 Corporate finance; *and*
 MGMT2401 Principles of management *or* MGMT3405 Organisational behaviour;
and
 MKTG2501 Introduction to marketing

Remarks: Open only to students studying a major in the BBA programmes

STRA4702. Global corporate strategy (6 credits)

This course provides students with in-depth learning on managing multinational corporations across various product, business, and geographic markets. Specifically, the course focuses on three central issues that are critical to the successful formulation of corporate strategy: (1) the decisions on which businesses to bring together inside the company and how they could create value, (2) how the company can grow in different settings through acquisitions, partnerships, or internal development, and (3) how the company manage its business portfolio. Overall, this course will highlight the criticality of making profound decisions about the right pathways to firm growth. It will provide theoretical framework and guiding principles for analysing practical problems at the corporate or group level as experienced by managers.

STRA4703. Business in Latin America (6 credits)

This course is aimed at providing students with a profound understanding of the Latin American business environment, preparing them for a career in international business. The course will address the issues, opportunities and complexities that are associated with doing business in Latin America or with Latin American firms.

DESCRIPTION FOR UNDERGRADUATE COURSES OFFERED BY SCHOOL OF ECONOMICS AND FINANCE (4-YEAR CURRICULUM)

The courses listed below may not be offered every year.

INTRODUCTORY LEVEL CORE COURSES

ECON1210. Introductory microeconomics (6 credits)

An introduction to the basic concepts and principles of microeconomics - the study of demand and supply, consumer theory, cost and production, market structure, incentives, and resource allocation efficiency.

ECON1220. Introductory macroeconomics (6 credits)

This course is an introduction to macroeconomics—the study of business cycle fluctuations and long-run economic growth. The course will first introduce students to the measurement of major macroeconomic variables and the main issues in macroeconomics. It will then introduce students to models that study the trend of the economy in the long run and the cyclical ups and downs of the economy in the short run. Empirical evidence and the effects of fiscal and monetary policies will be discussed along the way.

ECON1280. Analysis of economic data (6 credits)

This course studies the measurement and interpretation of economic variables, and how to model their relationships using appropriate empirical methods. Topics include interpretation of headline statistics, describing economic aggregates, modeling of economic relationships and drawing conclusions from observations.

Prerequisite: Level 2 or above in HKDSE Mathematics Module 1 or 2, or a pass in MATH1009 Basic mathematics for business and economics or MATH1011 University mathematics I or MATH1013 University mathematics II or concurrent registration in MATH1009 or MATH1011 or MATH1013.

Mutually exclusive: STAT1601 Elementary statistical methods, STAT1602 Business statistics, STAT1603 Introductory statistics and STAT2901 Probability and statistics: Foundations of actuarial science

Remarks: Not open to students taking or having taken STAT2601 Probability & statistics I.

FINA1310. Corporate finance (6 credits)

This is an introductory course that develops the basic concepts and tools applicable to corporate financial decisions. Three main tasks of financial managers are studied: (i) investment evaluation, (ii) financing decisions, and (iii) payout decisions. Specific topics include present value calculation, valuation of stocks and bonds, investment criteria and capital budgeting, risk and return, cost of capital, capital structure, raising capital, and dividend policy.

Prerequisite: ACCT1101 Introduction to financial accounting

Mutually exclusive: STAT3904 Corporate finance for actuarial science

ADVANCED LEVEL CORE COURSES

ECON2210. Intermediate microeconomics (6 credits)

Preference, utility and consumer choices; choices under uncertainty, introduction to game theory; theory of the firm; market structures; introduction to economics of information.

Prerequisites: ECON1210 Introductory microeconomics; *and*
a pass in MATH1009 Basic mathematics for business and economics *or* MATH1011 University mathematics I *or* MATH1013 University mathematics II *or* concurrent registration in MATH1009 *or* MATH1011 *or* MATH1013.

Mutually exclusive: ECON2211 Microeconomic analysis

ECON2220. Intermediate macroeconomics (6 credits)

Theories of income, employment, and the price level; analysis of secular growth and business fluctuations; introduction to monetary and fiscal policy.

Prerequisites: ECON1210 Introductory microeconomics; *and*
ECON1220 Introductory macroeconomics

Mutually exclusive: ECON2221 Macroeconomic analysis

ECON2280. Introductory econometrics (6 credits)

Econometrics is the branch of economics that formulates statistical methodology for use in analyzing economic data. Consequently, the objective of this course is to prepare students for basic empirical work in economics. In particular, topics will include multiple regression analysis, estimation and hypothesis testing, functional form specification, time series models, and limited dependent variable models. Students will have the opportunity to use actual economic data to test economic theories.

Prerequisites: ECON1210 Introductory microeconomics; *and*
ECON1280 Analysis of economic data *or* STAT1601 Elementary statistical methods
or STAT1602 Business statistics *or* STAT1603 Introductory statistics *or* STAT2601 Probability & statistics I *or* STAT2901 Probability & statistics: Foundations of Actuarial Science

Mutually exclusive: STAT3614 Business Forecasting; *and*
STAT3907 Linear models and forecasting

ECON4200. Senior seminar in economics and finance (6 credits)

This course applies core theoretical knowledge in economics and finance acquired throughout the undergraduate curriculum to research a real issue. The student may select and match core theoretical concepts with significant applications in the world, which could be of local, regional and global relevance, both contemporary and historical. The selection will include an application of these concepts to either the making of public policy or the strategic management of the firm. The choice of research topic should be selected to help students consolidate and integrate the concepts and tools learned in economics and finance through an analysis of the nature of the problem, its causes and consequences, the choice of feasible solutions, their tradeoffs, and also normative and political economy considerations.

Prerequisites: ECON2280 Introductory econometrics; *and*
FINA2320 Investments and portfolio analysis *and* FINA2322 Derivatives; *or*
ECON2210 Intermediate microeconomics *and* ECON2220 Intermediate

Remarks: macroeconomics
 Open only to Year 4 students majoring in economics or finance.

FINA2320. Investments and portfolio analysis (6 credits)

This course introduces students to the fundamental principles of investments and to major issues currently of concern to all investors. The concepts and skills developed from this course enable students to conduct a sophisticated assessment of current issues and debates covered by both the popular media as well as more-specialized finance journals. We emphasize equity investments and the main topics include: portfolio theory, equilibrium in capital markets, equity valuation, portfolio performance evaluation, and relevant institutional details.

Prerequisites: ECON1210 Introductory microeconomics; *and*
 FINA1310 Corporate finance

Co-requisites: ECON1280 Analysis of economic data; *or*
 STAT1602 Business statistics; *or*
 STAT1603 Introductory statistics

Mutually exclusive: STAT3609 The statistics of investment risk; *and*
 STAT3952 Investment and asset management

FINA2322. Derivatives (6 credits)

The major objective of this course is to promote an in-depth understanding of basic derivatives. Derivatives have become a popular hedging and investment tool over the last several decades and derivatives concepts are required for every advanced finance topic. This course provides students with a framework to understand the fundamental concepts of derivative products (forward and futures, options, swaps, and basic structured products), to develop the necessary skills used in valuing derivative contracts, and to understand a wide variety of issues related to risk management and investment decisions using derivatives.

Prerequisites: ECON1210 Introductory microeconomics; *and*
 FINA1310 Corporate finance

Mutually exclusive: IMSE4110 Financial engineering; *and*
 STAT3905 Introduction to financial derivatives; *and*
 STAT3618 Derivatives and risk management; *and*
 STAT3910 Financial economics I

Remarks: Not open to students taking or having taken MATH3906 Financial calculus

ADVANCED LEVEL DISCIPLINARY ECONOMICS ELECTIVES

ECON2214. Games and decisions (6 credits)

The first part of the course starts with sequential games and introduces the concept of subgame perfect equilibrium for solving sequential games. Then it introduces Nash equilibria through a series of concepts: dominant strategy, successive elimination of dominated strategies, and the minimax approach for simultaneous games. It also discusses the limitations of Nash equilibria and offers rationalizability as an alternative equilibrium concept. This forms the basic theory of the course, which is used to analyze repeated games and collective-action games in the second part of the course. Additionally, new solution (evolutionary stability) and equilibrium concepts (perfect Bayesian equilibrium) are introduced to deal with applications that involve imperfect rationality or imperfect information. Strategic moves and mechanism design are potential optional topics of the course.

Prerequisite: ECON1210 Introductory microeconomics

Mutually exclusive: STRA3709 Applications of strategic thinking in business

ECON2216. Industrial organization (6 credits)

This course studies the pricing and output decisions of firms and the performance of the market under various market structures. Topics include theories of oligopoly; product differentiation; the effects of imperfect and asymmetric information; the examination of pricing practices such as price discrimination, tie-in selling, and resale price maintenance; collusion and anti-competitive behaviours, and public policies related to the promotion or restriction of competition.

Prerequisite: ECON1210 Introductory microeconomics

ECON2217. Economics of networks (6 credits)

The world has become more and more connected since the appearance of the modern Internet in the early 1990s. The Internet allows buyers and sellers matched to each other directly or with the help of intermediaries. In a more connected world, buyers (sellers) can reach more sellers (buyers) and intermediaries can reach more buyers and sellers at the same time. It is not clear whether such change strengthens or weakens the bargaining power of the parties involved. Graph theory and (non-cooperative and cooperative) game theory are introduced in this course to shed light on these issues. Graph theory can also help us understand link analysis and Web search. Building on this, game theory is used to provide an analysis of how sponsored search markets work. Other topics covered by the course include: information cascades, network effects, power laws and rich-get-richer phenomena..

Prerequisite: ECON1210 Introductory microeconomics

ECON2223. Public finance (6 credits)

Study of the role of government in the economy, using microeconomic theory. The course covers public expenditure analysis and methods of financing government expenditures. It explores the underlying theory of welfare economics as well as the economic effects of public policy such as public sector pricing, expenditure and tax policies.

Prerequisite: ECON1210 Introductory microeconomics

ECON2225. Economics of population changes (6 credits)

Fertility and mortality rates changed drastically in many parts of the world. This course examines these demographic changes, their causes and consequences, and related policy issues. We first look at trends in world population and introduce fundamental demographic concepts of mortality, fertility, immigration and age structure. We then discuss economic consequences of demographic changes, including the demographic dividend, saving and retirement decisions, and human capital accumulation. We also examine economic causes of population changes. Finally, we examine policy issues related to demographic changes, such as retirement pension and health care reform.

Prerequisites: ECON1210 Introductory microeconomics; and
ECON1220 Introductory macroeconomics

ECON2232. Economics of human resources (6 credits)

This course studies the allocation of human resources through the labour market and the utilisation of human resources inside the firm. Issues related to investment in human capital, wage determination, labour force participation, worker mobility, hiring decisions and other personnel practices are examined.

Prerequisite: ECON1210 Introductory microeconomics

ECON2233. The economics of law (6 credits)

Economic analysis applied to law. Topics may include: efficiency of law, rules of liability, tort rights and remedies, criminal sanction, legislative processes as resource allocating and income distributing mechanisms.

Prerequisite: ECON1210 Introductory microeconomics

ECON2234. Transportation economics (6 credits)

Microeconomics applied to transportation. The cost-benefit approach to urban transportation includes topics such as optimal pricing and infrastructure investment, consumer's surplus and quasi-rents, peak load and cost allocation problems, economies of scale and dis-economies of scope, mode choice and value of time.

Prerequisite: ECON1210 Introductory microeconomics

ECON2249. Foreign trade and investment in China (6 credits)

Built upon contemporary scholarly work on international economics, economics of multinational enterprises and international business, this course presents a set of tools, concepts, and perspectives to help students comprehend key issues in China's foreign trade and investment and make related business decisions. This course contains several major themes, including:

- (a) What opportunities does the emergence of the Chinese economy offer to foreign firms?
- (b) Whether and how should a foreign firm be involved in the Chinese economy?
- (c) How to understand China's trade?
- (d) How to manage international trade with China?
- (e) How to manage direct investment projects in China and compete successfully in the China market?

Prerequisites: ECON1210 Introductory microeconomics; *and*
ECON1220 Introductory macroeconomics

ECON2252. Theory of international trade (6 credits)

This course deals with economic issues which are related to many countries. It provides students with global perspectives on economic and business decisions. Topics include why countries trade, how they trade, who benefits and who loses from trade, and what are the best trade policies. We also discuss recent globalization issues in this class.

Prerequisites: ECON1210 Introductory microeconomics; *and*
ECON1220 Introductory macroeconomics

ECON2253. International macroeconomics (6 credits)

The course is an introduction to an evolving and growing literature on international finance. Topics covered in the course include the international monetary system, the concept of balance of payments, theories of balance of payments, parity conditions, models of exchange rate determination, forward-looking market instruments (forward, futures, and options markets), Eurocurrency markets, and financial crises.

Prerequisites: ECON1210 Introductory microeconomics; *and*
ECON1220 Introductory macroeconomics

ECON2255. The economic system of Hong Kong (6 credits)

The course provides a comprehensive discussion of the salient aspects of the Hong Kong economy. Topics include Hong Kong's national income accounting and economic development, the monetary system and exchange rate regime, the financial system, public finance and fiscal policy, external trade and foreign investment, economic relations with the Mainland, the labour market and employment, the property market and housing policy, regulation of public utilities and competition policy, industrial development and policy, and income distribution. Emphasis will be given to both economic analysis and institutional arrangements of the major economic sectors and related policies. Attention will be given to topics of recent public concern.

Prerequisites: ECON1210 Introductory microeconomics; *and*
ECON1220 Introductory macroeconomics

ECON2257. Trade, investment and development in APEC economies (6 credits)

In this course, students will examine various important and timely issues facing several Asia-Pacific Economic Cooperation (APEC) economies. In particular, the international trade and foreign investment relationships among APEC members will be studied. Common theories and experiences of economic development and growth as well as innovation activities will also be highlighted. Particular attention will be paid to the special role of Hong Kong, China in the economic integration of APEC. Some of the APEC economies to be studied include Japan, Hong Kong, the Republic of Korea, the People's Republic of China, Chinese Taipei, the United States, Mexico, Russia, and Indonesia.

Prerequisite: ECON1210 Introductory microeconomics

ECON2262. Economic development (6 credits)

This course examines the leading theories in development economics and their empirical applications. After an overview of the classic models of economic growth, the course will discuss the importance of human capital, institutions, culture, politics, and violence, among others, in economic development. As a result of taking this course students are expected to understand both classic and frontier theories that are central to development economics, and to be able to conduct preliminary analysis on the pertinent realistic issues in an empirical fashion.

Prerequisite: ECON1210 Introductory microeconomics

ECON2264. Economic development of China (6 credits)

This course introduces the long-term economic development of China, with the focus on why and how China could achieve rapid growth after the early 1980s in spite of its long stagnation before, and the unique features China has exhibited in the development process. The course will examine these issues in the institutional and historical perspectives. The principal aim of the course is not merely to broaden students' intellectual horizon on China's economic development, but also to cultivate sense and skills in applying economic principles and methods to analyze the development issues of China.

Prerequisite: ECON1210 Introductory microeconomics
Mutually exclusive: STRA3705 China economy

ECON2266. Urban economics (6 credits)

Urban economics is the study of the location choices of firms and households. It examines the question of the where of economic activity, a question largely ignored by the other branches of economics. Topics include the growth and development of cities; land use within cities; urban transportation; housing and public policy; urban problems such as pollution, poverty and crime; and market forces determining the locations of ports and other transshipment points.

Prerequisite: ECON1210 Introductory microeconomics

ECON2271. Finance in history and society (6 credits)

This course focuses on the social impact of financial market development from a historical perspective. In particular, we will examine how human societies have innovated to deal with the challenges of risk events such as natural disasters, climate shocks, epidemic viruses, and wars. Our goal is to develop a risk-mitigation perspective on the evolution of human civilizations so that we can better understand how human civilizations have evolved the way they did and that as investors and professionals, we can better foresee future growth areas in frontier, emerging, and developed markets. The course coverage addresses what finance does for society and how it works to liberate the individual and facilitate freedom.

Prerequisite: ECON1210 Introductory microeconomics

ECON2272. History of economic thought (6 credits)

This course is a survey of fundamental developments in economic thought since the 18th century, with emphasis on works in English. The first part of the lectures reviews the writings of classical economists like Smith, Ricardo, and Mill, with an aside on Marx. The second part goes on to discuss the development of neoclassical theory from Jevons to Marshall and the Cambridge School, and mathematical economists like Fisher, Pareto, and Wicksell. If time allows, we will trace the evolution of macroeconomics from the time of Keynes.

Prerequisite: ECON1210 Introductory microeconomics

ECON2273. Economic history of China (6 credits)

An overview of China's economy in the past 1,000 years and its relationship with the rest of the world. Growth in productivity and population, development of transportation and market infrastructure, money and credit in the Song/Yuan and Ming/Qing era. China's foreign trade in medieval and early modern times. European discovery of the New World and its impact on China's economy and trade. Comparisons of Ming/Qing China with early modern Europe. Reasons why China fell behind and why the Industrial Revolution did not happen in Ming/Qing China. Implications for the 21st century.

Prerequisite: ECON1210 Introductory microeconomics

ECON2275. Political economy of public policy (6 credits)

The course provides a theoretical and empirical understanding of the political economy of public policy making and familiarizes students with the applications of political economic analysis to analyze important policy issues. Topic covered include: public goods, externalities, monopolies, regulation, rent seeking, law enforcement, public bureaucracy, political business cycles, and the economics of legal rules.

Prerequisite: ECON1210 Introductory microeconomics

ECON2276. State, law and the economy (6 credits)

Economic analysis is applied to the study of the evolving relationship between the state, the law and the economy. Topics covered include: paradox of voting, collective action, voting and elections, interest groups, agenda manipulation, dictator's dilemma, constitutional commitment, property rights and institutional change, and growth and stagnation of backward and modern economies.

Prerequisite: ECON1210 Introductory microeconomics

ECON2284. Mathematical methods in economics (6 credits)

The main emphasis of the course is to explain the mathematical structure of some undergraduate level economic theories, in terms of the way in which each particular mathematical assumption is translated into its economic counterpart. The course covers multi-variable unconstrained maximization, constrained maximization, comparative statics, and a brief introduction to some dynamic economic models.

Prerequisite: ECON1210 Introductory microeconomics

ECON2285. Mathematical economics (6 credits)

Modern economic theory treated mathematically. Topics may include: applications of optimization to choice theory, applications of the implicit function theorem to comparative statics, applications of differential and difference equations to stability of equilibria, applications of linear mathematics and fixed point theorems to Leontief and Arrow-Debreu models, and applications of optimal control theory and dynamic programming to certainty and stochastic dynamic optimization models.

Prerequisite: ECON1210 Introductory microeconomics

ECON2292. Current economic affairs (6 credits)

This seminar-style course is designed to train students to analyse economic problems of the day, particularly those relating to the Hong Kong economy. Students are expected to conduct supervised research on current economic problems and to lead and participate in classroom discussions.

Prerequisite: ECON1210 Introductory microeconomics

ECON3215. Uncertainty and information (6 credits)

This course examines the effects of uncertainty and imperfect information on individual decision making and on market equilibrium. Topics may include the expected utility hypothesis, risk bearing and risk sharing, search, adverse selection, signaling, contract theory, mechanism design, information acquisition and information transmission.

Prerequisite: ECON2210 Intermediate microeconomics

ECON3219. Selected topics in price theory (6 credits)

This course acts as a platform to provide an overview of topics that are conceived to be pivotal in economics. The topics are essentially micro-based, but have applications in other disciplines like macroeconomics and finance. Specific topics are picked by the instructor. Previous examples include venture capital and private equity, antitrust, competition policy, property rights, theory of the firm, incomplete contracting, financial contracting, bankruptcy, and corporate voting.

Prerequisite: ECON2210 Intermediate microeconomics

ECON3222. Monetary economics (6 credits)

This course discusses the role of money in the economy, including how money affects inflation, interest rates and output and employment in both the static and dynamic contexts. Related topics are theories of money demand and supply, the conduct of monetary policy, rules vs. discretion, adaptive and rational expectations, time inconsistency, origin of money, and electronic means of payments.

Prerequisite: ECON2220 Intermediate macroeconomics

ECON3224. Health economics (6 credits)

This course applies the tools of economic analysis to issues about the organization, delivery, and financing of health care. Topics include (but are not restricted to) the following: demand for health, for health care, and for health insurance; supply of health-care services---physicians, hospitals, drugs, medical technology; and health-care policies, systems, and reforms.

Prerequisite: ECON2210 Intermediate Microeconomics

ECON3229. Topics in macroeconomics (6 credits)

This course provides students with an up-to-date account of the theory and practice of modern macroeconomics. The following areas that have shaped modern macroeconomic research will be covered: real business cycle theory, endogenous growth theory, and new Keynesian theories of labour markets, asset markets and sticky prices. Other selected topics on fiscal and monetary policy will also be discussed.

Prerequisites: ECON2210 Intermediate microeconomics *and*
ECON2220 Intermediate macroeconomics

ECON3243. Capital theory (6 credits)

General equilibrium theory involving time under certainty conditions. The concepts of full information, stationary state, and steady state. Assumptions about information costs, transaction costs and complete markets. Fisher's separation theorem. Theory of consumption over discrete and continuous time. Theory of production over discrete and continuous time. Determination of general equilibrium over time. Intertemporal prices and interest rates.

Prerequisites: ECON2210 Intermediate microeconomics; *and*
ECON2220 Intermediate macroeconomics

ECON3283. Economic forecasting (6 credits)

This course introduces basic techniques in forecasting economic structural relationships. Topics include smoothing, filters, arima models, unit roots and stochastic trends, vector autoregressions, cointegration and error correction, regime switching, volatility, diagnostics, model selection, forecast evaluation and combination.

Prerequisite: ECON2280 Introductory econometrics
Mutually exclusive: STAT4601 Time series analysis

ECON3293. Reading course (6 credits)

This course consists of supervised reading and written work. Candidates may specialize in one topic under the supervision of faculty members of the School of Economics and Finance. Examples of topics are: the problem of social cost, investment in human capital, general equilibrium theory,

empirical methods in international trade, international monetary relations, theories of saving and the East Asian economies, and current economic problems of Hong Kong.

Candidates must submit the title of their project within the first two weeks of the semester for approval by the School Undergraduate Programme Director of the School of Economics and Finance. An original project paper is required in lieu of a written paper in the Examination. The project paper must be completed and presented not later than the first day of the assessment period for that semester. Candidates shall submit a statement that the project paper represent their own work (or in the case of joint work, a statement countersigned by their co-worker(s), which shows the degree of their work) undertaken after the registration in the course.

Prerequisites: ECON2210 Intermediate microeconomics; *and*
 ECON2220 Intermediate macroeconomics; *and*
 ECON2280 Introductory econometrics

Remarks: Candidates intending to take this course shall complete an application form which is available at the School Office (Room 908, K.K. Leung Building).

ECON4294. Dissertation (12 credits)

Candidates may write a dissertation under the supervision of faculty members of the School of Economics and Finance. Topics offered may vary from year to year, depending on the research interests of the lecturer. A satisfactory dissertation may be offered in lieu of two written papers in the Examination.

Candidates must submit the title and an outline of their dissertation for approval by the School Undergraduate Programme Director of the School of Economics and Finance not later than the last day of the revision period in the first semester. The dissertation shall be completed and presented not later than the first day of the assessment period for the second semester. (Note: The course extends over two semesters. Candidates must enroll in the first semester.)

Prerequisites: ECON2210 Intermediate microeconomics; *and*
 ECON2220 Intermediate macroeconomics; *and*
 ECON2280 Introductory econometrics; *and*
 Cumulative GPA of 3.0 or above at the time of enrolment

Remarks: Open only Year 4 students majoring in Economics.
 Candidates intending to take this course shall complete an application form which is available at the School Office (Room 908, K.K. Leung Building).

ADVANCED LEVEL DISCIPLINARY FINANCE ELECTIVES

FINA2311 Case studies in corporate finance (6 credits)

This course is structured around the most important financial decisions made at the firm level in an uncertain environment. For example: what capital structure to adopt (financing decision); how to value a firm or investment project (investment/valuation decision); how to raise capital in the equity market (IPO decision); what mechanisms to put in place to discipline managers and the largest shareholder (corporate governance decision); whether to return cash and how to return cash to investors (dividend/share repurchase decision); and whether a firm should engage in mergers and acquisitions (M&A) activities and how to do an M&A right (M&A decision). This course exposes students to some of the most fundamental issues in corporate finance today as well as some of the most important advances in corporate finance of the last decade. It will offer students an opportunity to understand how the concepts and theories of corporate finance are applied in real world and generate lasting impact on firm values, a driving issue faced and constantly asked by CFOs and CEOs. This course will be taught using a case-oriented approach.

Prerequisites: ECON1210 Introductory microeconomics; *and*
FINA1310 Corporate finance

FINA2312. Advanced corporate finance (6 credits)

The objective of this course is to introduce the theoretical literature on the microeconomics of corporate finance in a unified framework. Topics covered include: corporate financing and agency costs, corporate financing under asymmetric information, liquidity and risk management, corporate finance and product markets, passive and active monitoring in corporate finance, lending relationships and investor activism, control rights and corporate governance, and takeovers. Subtle elements of information and agency considerations are emphasized.

Prerequisites: ECON1210 Introductory microeconomics; *and*
FINA1310 Corporate finance

FINA2330. Financial markets and institutions (6 credits)

This course is designed to introduce and analyze the structure, operations and functions of the financial system. The course starts with an introduction to financial markets' role in the economy, and the determination of interest rates and valuation of cash flows. The course then discusses various financial markets including money markets, bond markets, mortgage markets, stock markets and derivatives markets. Financial institutions will be discussed with an emphasis on their major functions and operations.

Prerequisites: ECON1210 Introductory microeconomics; *and*
FINA1310 Corporate finance

FINA2331. Management of commercial banks (6 credits)

This course introduces basic bank management techniques that include: asset and liability management, liquidity and reserve management, credit analysis, loan pricing and off-balance-sheet banking. Regulatory issues of commercial banks are also discussed.

Prerequisite: ECON1210 Introductory microeconomics

FINA2332. International banking (6 credits)

Nature of international banking. Comparison with domestic banking. Jurisdiction and regulatory framework: the Basel Concordat. Xeno-currency markets and international banking. International financing techniques: loan syndication, project finance, NIFs, RUFs etc. Risk exposure and control: sovereign risk, country risk, exchange risk, interest risk and credit risk. Management and strategies of international banks. "National treatment" and financial centres.

Prerequisite: ECON1210 Introductory microeconomics

FINA2342. Insurance: theory and practice (6 credits)

Insurance is the study of risk financing through risk pooling. The use of insurance to reduce the adverse financial impact in case of a loss has become an important element of financial and risk management in our society. This course will cover the theories underlying each major type of insurance products; the characteristics of the contractual agreements pertaining to insurance products; the structure of the insurance industry and its impact on the pricing of insurance products; the operation of insurance companies and the need for government regulations of the industry.

Prerequisite: ECON1210 Introductory microeconomics

FINA2382. Real estate finance (6 credits)

An introduction to real estate economics, mortgage markets, real estate auctions in Hong Kong; pre-sale market in Hong Kong; pricing of land and residential/commercial properties; mortgage-backed securities and mortgage companies.

Prerequisite: ECON1210 Introductory microeconomics

FINA2383. International financial management (6 credits)

The course studies corporate financial decisions in an international setting. We start with basic concepts of international financial markets. These concepts include the global foreign exchange market and its operations, the international capital market, the global bond market, the international equity markets, and cross-border portfolio investment. Then, we discuss corporate financial decision issues including risk management, investment, capital structure, capital budgeting, and cash management in the global context.

Prerequisites: ECON1210 Introductory microeconomics; and
FINA1310 Corporate finance

FINA2390. Financial programming and databases (6 credits)

This course provides undergraduate students a foundation in managing and analyzing financial datasets. Data analysis is a very important skill for the students to master. The first part of the course focuses on building skills – data manipulation using programming languages. The second part introduces various financial databases. Through practice on real-world financial datasets, students will learn methods used to warehouse and retrieve data for statistical computing. The course then turns to analytical methods with a focus on demonstrating these methods on real-data from various contexts in finance. Methods covered include statistical modeling and inference, machine learning, textual analysis, classification and alternative datasets. Problem sets and projects will be the primary mode of learning. Course learning will be supplemented with exposure to industry speakers from the local financial industry.

Prerequisites: ACCT1101 Introduction to financial accounting; *or*
ECON1210 Introductory microeconomics; *or*
FINA1310 Corporate finance

FINA3322. Credit risk (6 credits)

Credit derivatives are the biggest financial innovations in the last 20 years. Credit risk analysis and management are of great interest to investment banks, commercial banks, traders, regulators, and rating agencies. This course provides an introduction as well as an in-depth understanding of credit risk measurement and credit derivatives such as credit default swaps. The objective is to provide a practice-oriented balance between developing a sound conceptual framework and market understanding and insight.

Prerequisite: FINA2322 Derivatives

Mutually exclusive: STAT4607 Credit risk analysis

FINA3323. Fixed income securities (6 credits)

This course is designed to provide a comprehensive introduction to fixed income securities by covering the following broad topical areas: (a) the institutions and operations involved in the fixed

income securities markets; (b) the valuation and hedging of fixed income securities; (c) the term structure of interest rate; (d) the use and application of interest rate derivatives in the areas of risk management and financial engineering; and (e) the interest rate models.

Prerequisites: ECON1210 Introductory microeconomics; and
 FINA2322 Derivatives *or* STAT3905 Introduction to financial derivatives; *and*
 FINA2320 Investments and portfolio analysis *or* STAT3609 The statistics of investment risk.

FINA3324. Interest rate models (6 credits)

This course introduces various state-to-the-art techniques in modeling fixed income securities. In particular, the course starts with the discount factor approach in pricing all kinds of bonds. Then we focus on modeling the discount factors. Models are introduced in two major parts. First, the course emphasizes discrete-time models based on binomial trees in order to understand the economic insight of the risk-neutral pricing. Second, extensions to continuous-time models are also discussed in detail. Calibration and implementation of the models will be studied. Other related topics may include interest rate risk management, interest rate derivatives, and monetary policy.

Prerequisites: FINA3323 Fixed income securities; *and*
 FINA3350 Mathematical finance

FINA3325. Alternative investments (6 credits)

This course provides an overview of various forms of alternative investments that include hedge funds, managed futures, private equity, venture capital, real estate, commodities and foreign exchange. The purpose of the course is to give students a good understanding of the operation of these investments; the benefits and pitfalls associated with them; and strategies to integrate them into the context of portfolio management. The current state of research and practice of the industry will be addressed.

Prerequisites: FINA2322 Derivatives; *and*
 FINA2320 Investments and portfolio analysis *or* STAT3609 The statistics of investment risk

FINA3326. Equity valuation and investment management (6 credits)

This course covers the practical applications and issues of financial analysis, valuation, and investment of equities. Topics include, but not limited to, the basic analysis of financial statements; valuation models-e.g. DCF, free cash flows and other methods commonly used in the market; risk and return analysis; equity research and stock selection process; portfolio construction; active vs passive and other styles of investment; performance evaluation and appraisal. Students will get hands-on experience using most up-to-date market data and industry and company information available.

Prerequisite: FINA2320 Investments and portfolio analysis

FINA3334. Private banking and wealth management (6 credits)

This course is an introduction to the fundamentals of private banking and wealth management for High Net Worth (HNW) individuals. Topics covered include, but are not limited to, an overview of the Asian private banking and wealth management industry with particular emphasis on the Greater China market; portfolio management, optimization and asset allocation; investment advisory and credit risk functions; tax and wealth planning tools for mobility, retirement and estate, including trusts, foundations, and insurance; behavioral finance; client relationship management; family office; business ethics and professional standards; and laws, regulations and compliance issues.

Prerequisites: FINA2322 Derivatives; *and*
 FINA2320 Investments and portfolio analysis

FINA3340. Risk management (6 credits)

This course covers the advanced techniques for corporate financial risk management. Topics include (i) the identification and measurement of financial risk, (ii) risk management for equity portfolios, (iii) risk management for fixed income securities portfolios, (iv) risk management for derivative securities portfolios, (v) risk management for financial institutions, (vi) Riskmetrics, (vii) credit risk management, and (viii) the recent development of risk management tools and techniques in financial markets.

Prerequisites: FINA2322 Derivatives; *and*
 FINA2320 Investments and portfolio analysis *or* STAT3609 The statistics of investment risk

Mutually exclusive: FINA4341 Quantitative risk management; *and*
 STAT4608 Market risk analysis

FINA3350. Mathematical finance (6 credits)

This course provides students with the necessary mathematical techniques used in continuous-time finance. It covers stochastic calculus, partial differential equation and applied probability. After taking this course, one should be able to fully understand no-arbitrage theory, the Black-Scholes equation, risk-neutral probability and martingales. The purpose of this course is to lay down a solid mathematical foundation for students to learn more advanced topics in financial engineering, such as exotic options, interest rate derivatives and credit risk models.

Prerequisite: FINA2322 Derivatives

Mutually exclusive: MATH3906 Financial calculus

FINA3351. Spreadsheet financial modeling (6 credits)

This course studies the design and implementation of computer programs for financial modeling using spreadsheets and structured programming techniques. The course will focus on developing skills in translating financial models into spreadsheets and programs using Microsoft Excel and Visual Basic for Applications (VBA), examining popular financial and investment models, integrating spreadsheet functionalities, programming, and interfaces in financial applications, and hands-on experience in designing, coding, and debugging computer programs.

Prerequisites: FINA2322 Derivatives; *and*
 FINA2320 Investments and portfolio analysis *or* STAT3609 The statistics of investment risk

FINA3353. Regulatory and operational issues in finance (6 credits)

This course addresses a number of practical issues in quantitative finance. They include compliance, taxation, operational risk, best practices, and professional codes of ethics as practiced in the quantitative finance industry. These issues are taught in the context of case studies so that students can appreciate the peculiar company-specific and market-specific factors in decision making. Famous cases such as Enron, Long-term Capital Management, and Lehman Brothers are examined.

Prerequisites: FINA2320 Investments and portfolio analysis; *and*
 FINA2322 Derivatives

FINA3360. Financial practicum (6 credits)

This course is designed for students who are hired by a reputable company to provide consulting service in the fields of Economics or Finance. The main purpose of this course is to help students relate economic or finance theories to the practical experience from their employment. They will be supervised and assessed jointly by a faculty member from the School of Economics and Finance and a supervisor/mentor from the participating company. Interested students should submit to the School Undergraduate Programme Director a proposal of no less than 1,000 words for approval.

Prerequisites: FINA2322 Derivatives; *and*

FINA2320 Investments and portfolio analysis

Remarks: Only available to FBE students.

Candidates intending to take this course shall complete an application form which is available at the School Office (Room 908, K.K. Leung Building).

FINA3381. Behavioral finance (6 credits)

Behavioral finance is the application of psychology to financial behavior. We will explore various behavioral frames, biases and heuristics and examine their implications on the aggregate market, individual investors, cross-sections of average returns and corporate decision making in a world of limited arbitrage.

Prerequisites: ECON1210 Introductory microeconomics; *and*

FINA1310 Corporate finance; *and*

FINA2320 Investments and portfolio analysis *or* STAT3609 The statistics of investment risk

FINA3383. Ethics, laws, regulations and compliance (6 credits)

This course covers the key elements of ethics and professional standards, applicable laws, regulations, and compliance in the asset and private wealth management industry. Topics include, but not limited to, ethics, professional standards, and code of conducts and best practices, know your clients, sales and suitability, investor protection, anti-money laundering, timely and accurate communications, independence and objectivity, fair dealing, compliance issues and compliance handling, relevant local rules and regulations, and international best practices for investment professionals. Selected cases will be used for discussion in class.

Prerequisites: ECON1210 Introductory microeconomics; *and*

FINA1310 Corporate finance

FINA3384. Special topics in finance (6 credits)

This course covers current developments in finance. Possible topics include security trading and market making, venture analysis, financial contracting, investment strategies for local markets and other current issues in finance. The exact topics to be offered will be determined by the lecturer(s).

Prerequisites: FINA2322 Derivatives; *and*

FINA2320 Investments and portfolio analysis

FINA3391. Reading course (6 credits)

The course consists of supervised reading and written work. Candidates may specialize in one topic under the supervision of faculty members of the School of Economics and Finance.

Candidates must submit the title of their project within the first two weeks of the semester for approval by the School Undergraduate Programme Director of the School of Economics and Finance.

An original project paper is required in lieu of a written paper in the Examination. The project paper must be completed and presented not later than the first day of the assessment period for that semester. Candidates shall submit a statement that the project paper represents their own work (or in case of joint work, a statement countersigned by their co-worker(s), which shows the degree of their work) undertaken after the registration in the course.

Prerequisites: ECON2280 Introductory econometrics; *and*
 FINA2320 Investments and portfolio analysis; *and*
 FINA2322 Derivatives

Remarks: Candidates intending to take this course shall complete an application form which is available at the School Office (Room 908, K.K. Leung Building).

FINA4341. Quantitative risk management (6 credits)

The objective of this course is to introduce concepts, techniques and framework for quantitative risk management at financial institutions. Financial firms, with their complicated list of positions in a mixture of instruments, are exposed to various sources of financial risk. This class focuses mainly on market risk, the risk of unexpected changes in prices and rates. The first part of the course introduces basic concepts in risk management and builds the toolkit for measuring risk quantitatively. The second part of the course is devoted to studying the widely accepted Value at Risk (VAR) systems, including calculations, back testing and flaws of VAR. The course also touches on other aspects of financial risk such as liquidity risk, credit risk and operational risk.

Prerequisite: FINA3350 Mathematical finance
 Mutually exclusive: FINA3340 Risk management; *and*
 STAT4608 Market risk analysis

FINA4350. Natural language processing and text analytics in finance (6 credits)

This course covers the main elements of natural language processing (NLP), text analytics, and text mining, providing students with a foundation in collecting, managing, and analyzing textual data with financial and economic applications in mind, such as FinTech. Examples of potential applications include understanding and responding to sentiment in financial newspapers and social media, using social media to improve performance in asset/investment management, due diligence, Fed watching, monitoring of company events, and detecting insider trading. Although students write their own computer programs in this course, they are not required to implement most algorithms from scratch. Instead, the focus of this course is on how to use existing state-of-the-art open-source software libraries and how to apply them in a financial context. This course consists of three parts. In the first part, we work with real-world textual data sets to obtain proficiency in collecting, importing, organizing, and cleaning textual data from sources related to finance and economics. Among others, we cover web scraping, textual corpora, text processing, tokenization, stemming, and stop word removal. In the second part we delve into a more detailed analysis of NLP, text analytics, and machine learning with a particular focus on FinTech. For instance, we examine bag-of-words, word weighting schemes, document classification, document clustering, sentiment analysis, and topic models. The third part consists of summarizing, displaying, and visualizing results obtained from NLP and text analytics for applications in finance and economics.

Prerequisite: ECON2280 Introductory econometrics

FINA4354. Financial engineering (6 credits)

Financial engineering is the process of constructing new instruments by using bonds and individual derivatives such as forwards, calls, puts, and exotic options as basic building blocks. The process involves designing, pricing and managing the instruments. In this course, we anatomize a few popular structural products. We then discuss how to price these products by studying the price of the

embedded exotic options. We study the risk exposure of the investors and the risk management of the issuer. We also discuss some topics on the market for volatility trading, numerical methods for option pricing, and models beyond Black-Scholes.

Prerequisite: FINA3350 Mathematical finance

FINA4392. Dissertation (12 credits)

Candidates may write a dissertation under the supervision of faculty members of the School of Economics and Finance. A satisfactory dissertation may be offered in lieu of two written papers in the Examination.

Candidates must submit the title and an outline of their dissertation for approval by the School Undergraduate Programme Director of the School of Economics and Finance not later than the last day of the revision period in the first semester. The dissertation shall be completed and presented not later than the first day of the assessment period for the second semester (Note: The course extends over two semesters. Candidates must enroll in the first semester).

Prerequisites: ECON2280 Introductory econometrics; *and*
FINA2320 Investments and portfolio analysis; *and*
FINA2322 Derivatives; *and*

Cumulative GPA of 3.0 or above at the time of enrolment

Remarks: Open only to Year 4 students majoring in Finance.
Candidates intending to take this course shall complete an application form which is available at the School Office (Room 908, K.K. Leung Building).
