

## MODULE DESCRIPTIONS

### 1 Department of Business Policy

#### **BSP1004 Legal Environment of Business**

Modular Credits: 4

Workload: 2-1-0-3-4

Pre-requisite: Nil

This course will equip business students with basic legal knowledge relating to commercial transactions so that they will be more aware of potential legal problems which may arise in the course of business and having become aware, to have recourse to such professional legal advice as is necessary in the circumstances. Subjects that meet these requirements include the Singapore Legal System, mediation and arbitration to resolve disputes, the types of various business organisations for businesses to conduct effectively within the law, directors' duties & liabilities, the making of valid business contracts and the rights & obligations of traders in the market place and negligence in the business environment through misstatements.

#### **BSP1005 Managerial Economics**

Modular Credits: 4

Workload: 2-1-0-4-4

Pre-requisite: Nil

This course aims to equip students with the basic working knowledge of contemporary economic thinking, and thus lays the foundation to many areas of their business studies in coming years. We adhere closely to mainstream economics thinking, but pay particular attention to business applications. We take our students through market equilibrium, competition, monopoly, price and non-price business strategies. Our teaching methodology takes a fundamentally problem-solving approach. Models and analytical skills are introduced in order to solve business problems systematically.

Information technology and the Internet have made many changes in the way businesses are run, and Managerial Economics has changed significantly with it. We now devote a new portion of this course to discussing how network effects propel the information age, resulting in significant monopoly powers such as Microsoft. Related anti-trust and other cases are also discussed and analysed.

#### **BSP2001 Macro and International Economics**

Modular Credits: 4

Workload: 2-1-0-2-6

Pre-requisite: BSP1005

The aim of this course is to introduce business students to the basic principles of macro-economics and international economics. In contrast to micro-economics, macro-economics looks at the behaviour of the economy as a whole; in particular the behavior of aggregate measures such as output, unemployment, inflation, economic growth, and the balance of trade. It also deals with the determination of exchange rates, the operation of monetary and fiscal policy under different exchange rate regimes, and, more broadly, international trends that may influence the overall direction of the world in the next few years.

#### **BSP2005 Asia Pacific Business, Ethics and Society**

Modular Credits: 4

Workload: 2-1-0-2-5

Pre-requisite: BSP2001

The theme of this course is developing an understanding of the business environment in the Asia as it relates to the practice of international business. The first part of the course focuses on international business issues including international trade, foreign direct investment and the strategy and management of multinational enterprises. The second part of the course focuses on societal and ethical issues as they relate to the practice of international business in the Asia Pacific region. Student presentations and class participation form an important component to the development of an understanding of these issues.

#### **BSP3001 Business Policy and Strategy**

Modular Credits: 4

Workload: 1-2-0-3-4

Pre-requisites: All foundation modules

This is the integrative capstone course for undergraduate business students. It focuses on the roles, issues and dilemmas facing top managers. It examines the concept of strategy and the different aspects of managing strategically. There are three main learning objectives: Firstly, for students to understand the roots of success and failure in firms, as relating both for firm characteristics and to their micro and macro environments. Secondly, for students to appreciate some of the pressing issues facing corporations in fast-moving environments. Thirdly,

through the case method, students have an opportunity, in a simulated managerial role, to apply holistically what has been learnt in the functional business disciplines to complex business problems. Major topics include industry analysis, strategy formulation at the corporate, business and functional levels, firm diversification, strategic alliances, corporate governance, firm resources, core competencies, and the role of structure, culture, rewards, and control in strategy implementation. This course is targeted for all the final year business students.

### **BSP3511 Corporate Law and Finance**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: FNA2004

The course aims to equip business students majoring in finance or international business with basic legal knowledge relating to the regulatory framework of our domestic and foreign financial markets. More specifically, the course examines important corporate finance concepts such as the raising of funds by a company from the domestic and international markets (e.g. IPOs, syndicated loans), trading offences, joint ventures, mergers and acquisitions etc. from a legal point of view. Besides the use of academic textbooks and journal articles, actual legal precedents and documents used by practitioners are also employed to explain drafting styles, negotiation methodology and legal rights and liabilities of the various parties in the transactions.

### **BSP3512 Tax and Planning**

Modular Credits: 4

Workload: 3-0-0-2-5

Pre-requisite: Nil

This course aims to introduce students to the basic concepts of income taxation in Singapore. Since a large portion of a business organisation's profits goes towards the payment of income tax, it is absolutely crucial for students to have an understanding of how tax works and how to legally minimize it. This course would be relevant to those who wish to set up their own business and for those who wish to work in fields of accounting, consulting or financial management. Further, since in all likelihood everyone would have to pay income tax some day, this course would be of relevance to all others as well.

### **BHT4001 Honours Thesis**

Modular Credits: 12

Workload: Vary depending on individual student with their supervisor

Pre-requisite: Vary depending on topics of research

The purpose of the Honours Dissertation is to provide the student with an opportunity to select and study a research problem of importance and present his findings logically and systematically in clear and concise prose. The research topic can be either the study of a business problem involving the use of analytic or predictive models, or a research study using field research techniques or data analysis leading to sound generalisations and deductions, or a scientific analysis of a theoretical problem. The student is expected in this exercise to demonstrate (a) a good understanding of relevant methodology and literature (b) the significance and relevance of the problem (c) a logical and sound analysis and (d) a clear and effective presentation.

### **BCP4002 Consulting Practicum**

Modular Credits: 8

Workload: Vary depending on individual student with their supervisor

Pre-requisite: Vary depending on topics of research

The job scope of the Consulting Practicum is part of the initial negotiations between the students and the company. They learn how to define a job scope, negotiate the resources, and negotiate the timeline and deliverables. The instructor is only involved in confirming the final agreement between the students and the company. It is an interactive process as the students have to make a preliminary survey of the company before finalizing the job scope. The project is divided into stages -- planning, research and assessment, and recommendations. It is not the same as an industrial attachment as the students take a strategic approach to dealing with a real company issue - it is a consulting project, pure and simple. It is not an academic exercise as the research is focused on real work issues. Students use their skills learnt in library work and market research.

### **BSP4511 Industry and Competitive Analysis**

Modular Credits: 4

Workload: 3-0-0-3-4

Pre-requisite: BSP3001

This course addresses issues related to one of the most central challenges that managers and firms face in business, "How to achieve and sustain superior performance in the face of competitive pressures?" In this module, we evaluate this issue from the perspective of evaluating competition, competitors, industries, and environmental trends, so as to identify conditions under which firms can out-perform competitors or their own

historical standards. Emphasis will be placed on identifying sources of competitive advantage, and industry characteristics that allow or prevent the exploitation of these advantages. Specific topics to be covered include firm competencies, competitor analysis, industry structure and analysis, sources and impact of radical changes in industry structure, economies of scale and scope, competing in multiple industries, competition and cooperation, mergers and acquisitions, competition in the Asia Pacific and Asia Pacific strategies.

#### **BSP4512 Global Strategic Management**

Modular Credits: 4

Workload: 3-0-0-3.5-4.5

Pre-requisites: BSP2001

The course aims to provide participants with the basic theoretical knowledge, skills, and sensitivities that will help them deal effectively with key management issues and challenges in today's global business environment. We intend to explore the major issues and challenges facing companies with worldwide operations as seen by the managers themselves. The topics addressed include the following: challenges of operating in a global environment, formulation of global strategies and organisational policies (implementation) to achieve the goals set out under the formulation process. Case studies, group projects and presentations will be extensively used to illustrate the concepts.

#### **BSP4513 Econometrics: Theory and Practical Business Application**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: BSP1005

This course is tailored to introduce students to the science and art of building and using econometric models. It is particularly useful for students doing quantitatively oriented projects. It hopes to prepare future officers, executives and managers for responsibilities in monitoring, analyzing and forecasting trends and business development in their respective industries. Students will be refreshed and equipped with some fundamental economic concepts of statistical tools right from the beginning so as to follow the course comfortably. Models such as CAPM, returns to schooling, term structure of interest rates are used to convey the theory and practical aspects of this course. Moreover, the course emphasis hand-on learning involving students in tutorial sessions and exercises to formulate models, estimate them with the Window-based econometric software (EVIEWWS), and practice analytical interpretation.

## **2 Department of Decision Sciences**

#### **DSC2003 Management Science**

Modular Credits: 4

Workload: 2-1-0-4-3

Pre-requisite: Nil

Management science makes use of analytical methods to distil intelligence for leaders' decision-making. Thus, this module is concerned with modelling and problem solving, and shall find applications in fields like finance, economics, operations management, logistics, and engineering.

As an introductory module, we strive for breadth, giving an overview of several practical approaches, as well as sufficient depth, so as to provide a substantial feel for the discipline and a good foundation for further reading. Topics will include linear programming (including spreadsheet solution & sensitivity analysis), integer programming, network flow models, project management, decision analysis, and queuing models.

(Although no prerequisite is stated, this module assumes prior knowledge of basic probability concepts like expected value, variance, conditional probability, Bayes's Rule, Normal distribution, and Poisson distribution. Students should ensure that they are adequately prepared for this module.)

#### **DSC2006 Operations Management**

Modular Credits: 4

Workload: 3-0-0-4-3

Pre-requisite: Nil

All manufacturing and service organisations have an operations function that is primarily responsible for the production and delivery of their products and services. The operations function therefore not only affects final product quality but also impacts customer service and the overall competitiveness of the organisation. The objective of this course is to introduce and highlight the strategic importance of operations, and the fundamental principles and concepts of effective operations management. Students will examine how operations decisions in

areas such as quality, process design, capacity and inventory can be managed, controlled and improved. Operations in both manufacturing and service organisations will be addressed.

(Although no prerequisite is stated, this module assumes prior knowledge of basic probability concepts like expected value, variance, Normal distribution, and Poisson distribution. Students should ensure that they are adequately prepared for this module.)

### **DSC3201 Supply Chain Management**

Modular Credits: 4

Workload: 3-0-0-4-3

Pre-requisite: DSC2006

This course considers the operation of a supply chain from a managerial perspective, serving two main objectives: to provide tools for design, analysis, management and performance improvement of supply chains, and to introduce and discuss recent influential innovations in supply chain management such as B2B portals. Students will be taught to appreciate the need to balance between responsiveness and efficiency in the four major components of the chain: Inventory, Transportation, Facilities, and Information. These four components will be introduced to the students through suitable mathematical and behavioural models. It is recommended that students have some understanding of the Internet and e-business.

### **DSC3202 Purchasing and Materials Management**

Modular Credits: 4

Workload: 3-0-0-4-3

Pre-requisites: DSC2006

The primary aim of this course is to get students interested in and acquainted with the fundamental concepts, models and instruments in purchasing and materials management. Key areas like buying supplies, logistics, contracts, stock and inventory control, distribution and warehouse management will be covered. Some insights into the current developments and biggest problem areas in this field are provided. A combination of informative and interactive lectures, and application-oriented case assignments will be used for the pedagogy and considerable attention is devoted to the discussion of practical / managerial issues.

### **DSC3203 Service Operations Management**

Modular Credits: 4

Workload: 3-0-0-4-3

Pre-requisite: DSC2006

The objective of this course is to provide a comprehensive and systematic coverage of managing operations in service or service-oriented organisations such as banks, hospitals, airlines, retail outlets, restaurants and consultant agencies. Specifically, students will focus on the problems and analysis relating to the design, planning, control and improvements of service operations. Topics covered include service strategy, system design, location and layout of service systems, resource allocation, workshift scheduling, vehicular scheduling and routing, and service quality. This course is essential for students wishing to work in service or service-oriented environments.

### **DSC3211 Internet for e-Business**

Modular Credits: 4

Workload: 3-0-0-4-3

Pre-requisite: Nil

The Internet has given rise to new organisational forms such as virtual organisations and e-markets for physical and digital goods and services. These developments have potentially profound implications for firms and society as a whole. This module provides a broad overview of Internet technologies and applications that are changing the way business is done. The module discusses various aspects of Internet commerce such as infrastructure, security, payment systems, social, policy, legal and privacy issues. Examples of businesses using the Internet will be used to illustrate various issues, challenges and problems in leveraging the Internet by business managers.

### **DSC3212 Internet Business Models**

Modular Credits: 4

Workload: 3-0-0-4-3

Pre-requisite: Nil

This module provides business students with an understanding of Internet business models (e.g., Internet access providers, online portals, online content providers, online retailers, online brokers, online market makers, networked utility providers, application service providers) and its applications to different types of businesses. The changing properties of the Internet (e.g., mediating technology, universality, network externalities), as well as the components, linkages and appraisal of business models are examined. Value configurations (e.g., value chain, value shop and value network) and the viability of various models and are also discussed. Cases are used to illustrate the different business models and their evolution.

### **DSC3213 Strategic Information Systems**

Modular Credits: 4

Workload: 3-0-0-4-3

Pre-requisite: Nil

This module provides business students with an understanding of the strategic role of information systems and technology in business organisations. Frameworks (e.g., strategic grid, strategic thrusts, customer resource life cycle) for analysing the strategic impact of information technology and the Internet on organisational and industry structures are introduced. Information systems that support or shape an organisation's competitive strategy are discussed. The module also examines the sustainability of information technology-based competitive advantage, strategic information risks, business-technology alignment, assessment of IT investments as well as various management issues and challenges in identifying, developing and implementing strategic systems.

### **DSC3214 Introduction to Optimisation**

Modular Credits: 4

Workload: 3-0-0-3-4

Pre-requisite: DSC2003

This module introduces students to the theory, algorithms, and applications of optimisation. Optimisation methodologies include linear programming, integer programming, network optimisation, dynamic programming, and nonlinear programming. Problem formulation and interpretation of solutions will be emphasized. Throughout the course, references will be made wherever appropriate, to business applications, such as portfolio selection, options pricing, and vehicle routing. Students who are interested in computer and quantitative approaches in business will learn many useful techniques in large business system management from this course.

### **DSC3215 Stochastic Models in Management**

Modular Credits: 4

Workload: 3-0-0-3-4

Pre-requisite: DSC2003

This module introduces students to management science models that characterize random phenomena in real world applications, particularly in the field of finance and operations management. We start with elementary probabilistic models and illustrate their applications in inventory management and financial engineering. We then construct discrete Markov chain models and demonstrate their applications in managing queues and for evaluating the performance measures of queueing systems. When analytical models are inadequate for studying real world random phenomena, simulation might be a feasible approach. We will discuss several well-known methods to simulate randomness.

### **DSC3216 Forecasting for Managerial Decisions**

Modular Credits: 4

Workload: 3-0-0-4-3

Pre-requisite: ST1131A

Managerial success rests strategically on the ability to forecast the demand for the goods and services that a firm provides. Demand forecasting drives the effective planning of the supply chain: personnel requirements, capital investment, production schedules, logistics etc.

This module surveys forecasting techniques and their applications. These encompass traditional qualitative (e.g. front line intelligence, Delphi method) and quantitative techniques (e.g. regression, time series) as well as emerging techniques based on neural networks. Concepts such as trends, seasonality and business cycles will be discussed. Their value in improving forecasts will be illustrated. The module makes extensive use of software including MS Excel and dedicated forecasting packages.

### **DSC3217 Managerial Decision Making**

Modular Credits: 4

Workload: 3-0-0-4-3

Pre-requisite: ST1131A

This module is intended to help you understand and improve the quality of choices you make in managerial and personal decisions involving uncertain information by applying the theory and techniques relating to the decision making process. It involves practical technique such as Decision Trees to help you make better choices by structuring and formulating the decision problems in a systematic and logical manner. Students will gain knowledge in the following topics; Fundamental: problem formulation, Decision Trees, Influence diagrams, Bayesian rule, value of information; Uncertainty and measurements: Subjectivist versus frequentist views of probability, Axioms for probability, Probability elicitation; Single-attribute utility and value theory: Axioms for preference; Certainty equivalents and risk aversion; The coefficient of risk aversion; Criticisms of utility theory: the

Allais and Ellsberg paradoxes; and Multi-attribute utility theory. A series of managerial decision examples will be used to illustrate the application of these methodologies. Most of the decision problems will require students to use computer software. The knowledge acquired from this module may prove useful in your personal decision making and in decisions that you will be making during your professional career.

### **DSC3218 Physical Distribution Management**

Modular Credits: 4

Workload: 3-0-0-3-4

Pre-requisites: DSC2006 In addition, any general mathematics course offered by the Department of Mathematics will be useful and students should have some programming knowledge in Visual Basic

This course helps students to learn about the strategic importance of good distribution planning and operations. A strategic framework of physical distribution design is presented to help build critical managerial skills for decision making in the management of physical distribution and transportation of goods and services. The course emphasizes the application of quantitative and analytical techniques to physical distribution system design (facility location, vehicle routing and fleet planning) and transportation management in Asia. Some programming knowledge of Visual Basic is assumed. Where available, Asian cases will be used to highlight and educate the reader on unique business operations in this region.

### **DSC3219 Quality Management**

Modular Credits: 4

Workload: 3-0-0-4-3

Pre-requisites: ST1131A and DSC2006

The purpose of this module is to provide a broad array of tools, techniques and the philosophies concerning the application of the Total Quality Management (TQM) approach to manufacturing and service industries. Students will learn the basic quality concepts and explore the three fundamental principles of Quality Management: Quality Planning, Quality Assurance, and Quality Control. Topics include Quality performance measurements, Process Management/Improvement, Statistical Process Control, Measurement Tools, and Customer Needs/Expectations. Student will also gain knowledge in service quality management. Apart from learning the methodologies, students will solve quality problems using computer software.

### **DSC3220 Operations Planning and Scheduling**

Modular Credits: 4

Workload: 3-0-0-4-3

Pre-requisite: DSC2006

This course is an advanced operations course on planning and scheduling in manufacturing, service, and supply chain environments. The objective of the course is to introduce students to the major tradeoffs and issues involved in designing effective operations planning and scheduling systems. The topics examined include demand forecasting, aggregate planning, advanced inventory models, advanced scheduling techniques, Material Requirement Planning (MRP)/Enterprise Resource Planning (ERP), and Just In Time (JIT). The emphasis is on model formulation and analysis through the use of analytical simple models as well as application in practice through the use of case studies.

### **DSC3221 Simulation Modelling for Informed Decision-Making**

Modular Credits: 4

Workload: 3-0-0-4-3

Pre-requisites: ST1131A and DSC2006

The course is intended to provide students with a set of modern simulation modelling skills and hands-on experience in building simulation models. Students will be exposed to an overview of simulation modelling and analysis, generation and analysis of simulation input, modelling and design of experiment, and analysis of simulation output. The primary emphasis is on modelling problems in business, production and operations by means of discrete-event simulation for informed decision-making. The importance and practice of using a sound modelling approach will be particularly emphasized throughout the course. The backbone of the course involves the use of spreadsheets and simulation software to build simulation models, conduct experiments and analyse data. At the end of the course, students are expected to build from scratch valid computer simulation models with animation.

### **DSC3222 Topics in Operations and Supply Chain Management**

Modular Credits: 4

Workload (tentative): 3-0-0-4-3

Pre-requisites: DSC2006 Additional pre-requisites may be imposed by the instructor depending on the course offered

This module is a course in some specialized area of operations and supply chain management that is not already covered by the existing modules. The topics offered could be of particular contemporary relevance or of significant current interest to industry. Examples of such topics include logistics processes, project management, Asian supply chain management, supply chain in the e-Business era, and operations in financial services.

#### **BHT4001 Honours Thesis**

Modular Credits: 12

Workload: Vary depending on individual student with their supervisor

Pre-requisite: Vary depending on topics of research

The purpose of the Honours Dissertation is to provide the student with an opportunity to select and study a research problem of importance and present his findings logically and systematically in clear and concise prose. The research topic can be either the study of a business problem involving the use of analytic or predictive models, or a research study using field research techniques or data analysis leading to sound generalisations and deductions, or a scientific analysis of a theoretical problem. The student is expected in this exercise to demonstrate (a) a good understanding of relevant methodology and literature (b) the significance and relevance of the problem (c) a logical and sound analysis and (d) a clear and effective presentation.

#### **BCP4002 Consulting Practicum**

Modular Credits: 8

Workload: Vary depending on individual student with their supervisor

Pre-requisite: Nil

The job scope of the Consulting Practicum is part of the initial negotiations between the students and the company. They learn how to define a job scope, negotiate the resources, and negotiate the timeline and deliverables. The instructor is only involved in confirming the final agreement between the students and the company. It is an interactive process as the students have to make a preliminary survey of the company before finalising the job scope. The project is divided into stages -- planning, research and assessment, and recommendations. It is not the same as an industrial attachment as the students take a strategic approach to dealing with a real company issue - it is a consulting project, pure and simple. It is not an academic exercise as the research is focused on real work issues. Students use their skills learnt in library work and market research.

#### **DSC4211 Seminars in Operations and Supply Chain Management**

Modular Credits: 4

Workload (tentative): 3-0-0-4-3

Pre-requisite: DSC3201

This module is designed primarily to provide BBA Honours students specialising in operations and supply chain management with an opportunity for advanced study in that concentration. The course would be research-oriented involving extensive literature reviews. Students will be expected to read journal articles and make presentations on topics relevant to the module.

### **3 Department of Finance And Accounting**

#### **FNA1002 Financial Accounting**

Modular Credits: 4

Workload: 2-1-0-3-4

Pre-requisite: Nil

The course provides an introduction to financial accounting. It examines accounting from an external user's perspective: an external user being an investor or a creditor. Such users would need to understand financial accounting in order to make investing or lending decisions. However, to attain a good understanding, it is also necessary to be familiar with how the information are derived. Therefore, students would learn how to prepare the reports or statements resulting from financial accounting and how to use them for decision-making.

#### **FNA2002 Managerial Accounting**

Modular Credits: 4

Workload: 2-1-0-3-4

Pre-requisite: FNA1002

This course covers major concepts, tools and techniques in managerial accounting. It provides students with an appreciation of how managerial accounting evolves with changes in the business environment and why the usefulness of managerial accounting systems depends on the organisational context. The emphasis is on the use of managerial accounting information for decision-making, planning, and controlling activities. Students are introduced to both traditional and contemporary managerial accounting concepts and techniques.

**FNA2004 Finance**

Modular Credits: 4

Workload: 2-1-0-3-4

Pre-requisite: FNA1002

This course helps students to understand the key concepts and tools in Finance. It provides a broad overview of the financial environment under which a firm operates. It equips the students with the conceptual and analytical skills necessary to make sound financial decisions for a firm. Topics to be covered include introduction to finance, financial statement analysis, long-term financial planning, time value of money, risk and return analysis, capital budgeting methods and applications, common stock valuation, bond valuation, short term management and financing.

**FNA2111 Personal Finance**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: Nil

This is an introductory course on how to manage one's personal finance. Topics to be covered include starting a financial plan, cash budgeting, managing liquid assets, investments, managing credit, insuring one's assets, income tax and estate planning. Each topic is given a rigorous and balanced treatment by applying methods such as time value and basic investment principles to practical issues. At the end of the course, a student should have a better perspective of what personal financial planning entails, how to get started, avoid common pitfalls in financial planning and achieve desired outcomes for your financial goals.

**FNA3101 Corporate Finance**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: FNA2004

This course provides students with an in-dept understanding of the key financial issues faced by modern-day financial managers of corporations. The course will also equip students with conceptual and analytical skills necessary to make financial decisions. Topics to be covered include capital asset pricing model (CAPM), arbitrage pricing model (APT), valuation of firms and projects, real options, capital structure, dividends policy and mergers and acquisitions. Cases will be used to illustrate the concepts taught in lectures.

**FNA3102 Investment Analysis**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: FNA2004

This is an introductory course in investments. It provides a comprehensive coverage of basic concepts, theories, applications and decision-making rules in financial investment. Topics to be covered include fundamental security analysis on stocks, bonds, options and futures as well as modern portfolio management. On completion, candidates should be conversant in investment management in preparation for careers in financial analysis and financial planning, investment banking, and corporate finance. Candidates should also be equipped to write the Chartered Financial Analysts (CFA) Level 1 examinations in quantitative analysis, equity securities analysis and portfolio management.

**FNA3103 Financial Markets**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: FNA2004

This course seeks to provide an understanding of the role of financial markets in the economy. Topics to be covered include the importance of the structure (architecture) of the financial system, the functions of markets and institutions, and their implications for resource mobilization, resource allocation, allocative efficiency, and risk management. In addition, we consider: the structure of financial markets for different instruments, the range of instruments traded therein, and the mechanisms facilitating trade in financial assets, and an assessment of the structure and efficiency of these markets in Singapore vis-à-vis similar markets in other industrialized economies. To assess issues of efficiency and market structure, the course will include frequent references to markets in other economies, including the US, Australia, the UK, Hong Kong as well as other emerging market economics.

**FNA3111 Corporate Accounting and Reporting**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: FNA1002

This course examines the conceptual and theoretical issues underlying the corporate accounting and reporting requirements under the US, International and Singapore Accounting Standards. This allows the students to understand the economic rationales behind the accounting treatment of major financial statement items. It also equips the students with skills in using financial information for decision-making. Topics to be covered include conceptual framework in financial reporting, accounting for foreign currency translation, leasing, preparation of consolidated financial statements, earnings quality management and off-balance sheet financing,

#### **FNA3112 Managerial Planning and Control**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: FNA2002

The course examines various means by which control can be exercised and the types of accounting information that allow for different means of control. Topics to be covered include the nature of control, responsibility centers, economic value added, transfer pricing, strategic planning, budgeting, performance evaluation systems, executive compensation, control for differentiated strategies, control for multinational organisations. Students learn how control is exercised through case analyses, case presentations and in-class discussions. The case approach makes control "come alive" for the students with descriptions of control at various real organisations. The case presentations make the students think critically and strategically. The in-class discussions allow the students to evaluate the pros and cons of different approaches and solutions to control problems.

#### **FNA3113 Financial Statement Analysis**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: FNA1002

This course deals with the process of financial reporting and the analysis of financial statements, and addresses the question of whether the accounting process yields numbers that accurately reflect the economics of the transaction, and if not, what can analyst/user do to overcome this limitation. It aims to create an understanding of the environment in which financial reporting choices are made, what the options are and how to use these data in making decisions. Course materials are built around the accounting and reporting issues faced by real companies today, to give students a real business context for understanding the many forces that can affect a company's accounting choices.

#### **FNA3114 Global Financial and Accounting Issues**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisites: FNA1002

Accounting is often said to be the language of business. However, there are differences in the way accounting is applied depending on where you are in the world. This course provides students with an in-depth understanding of the complexities of accounting in an international context.

Topics to be covered include the global business environment which necessitates a common business language, the diverse accounting regimes and the underlying themes, efforts at coping with and resolving international accounting differences, key financial reporting issues relating to segment reporting, international financial ratio analysis, business combinations, intangible assets, and foreign currency translation, key managerial accounting issues relating to the challenges of measuring performance of foreign operations whose structures differ from those of a simple corporation and other accounting issues relating to international taxation and auditing.

#### **FNA3115 International Financial Management**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: FNA2004

This course is concerned with how financial managers function in an international environment. This requires that we understand: (1) the institutional arrangements of different international financial markets, (2) the accompanying financial instruments and innovations, and (3) the salient factors affecting the financial operations of multinationals.

Topics to be covered include the foreign exchange market, Eurobond/Eurocurrency markets, as well as the Asian bond markets, the effects of exchange rate movements on both domestic and international operations and methods of hedging these exposures, operational (trade financing techniques) and strategic (foreign direct investment decisions and political risk management) financial management issues, and the latest financial innovations in the international financial market.

#### **FNA3116 Options and Futures**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: FNA2004

This course is an introduction to basic financial derivatives with an emphasis on forward, futures, and option contracts. Topics to be covered include the structure of forward, futures and options markets, the pricing of futures and options contracts, and the applications of futures and options in hedging and speculation. The approach will cover both the theoretical and applied issues in financial derivatives. Key concepts and theories will be illustrated by examples of derivatives usages in practice and the implementation of hedging strategies.

### **FNA3117 Bank Management**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: FNA2004

This course builds on basic financial theory and the principles courses in economics. It addresses topics that are important for managing financial institutions in a rapidly changing national and global environment. Upon successful completion of the course, student should be able to understand the role of financial institutions in the economy; explain why banks are unique, and therefore merit special attention; to understand the analytical foundations underlying financial institutions management, and be able to use them to analyze important financial issues, including financial crisis; be familiar with risk management techniques to deal with the various risks banks and other financial institutions face.

### **FNA3118 Financial Risk Management**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: FNA2004

This course covers one of the core functions of finance, namely, risk management. The objective is to introduce the fundamental concepts, principles and practices of financial risk management. The focus of the module is on the identification, measurement, monitoring and control of financial risk. It also addresses the basic financial and statistical techniques that enhance risk management decision-making.

The course starts by looking at risk management concepts and the risk management process. It then examines the approaches used to identify, measure and reduce risks. Topics to be covered include risk measurement - Value-at-Risk (VAR) methods, measuring and managing market risk and credit risk, risk management applications, managing other risks such as liquidity and operational risks, regulatory and capital issues, risk-adjusted performance, and implementing a risk management programme.

### **FNA3119 Risk and Insurance**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: FNA2004

Business entities and individuals are exposed to substantial risk associated with losses to property, income, and wealth because of damage to assets, legal liability, disability, retirement, and death. Costs associated with legal liability and employee benefit programmes, particularly Central Provident Fund (CPF) and health care, have become matters of deep concern to company management. Individuals seeking coverage of their professional and personal risks have similar concerns. This course analyses the nature and impact of these risks and discusses appropriate risk management techniques. The emphasis is on the analysis and management of these problems for business entities, but these are substantial implications for the problems faced by individual and society. Topics to be covered include risk identification and measurement; risk control and transfer; risk financing with commercial insurance; self-insurance; captive insurance programmes; insurance markets and regulation; employee benefits and CPF; life and health insurance; personal financial planning; international risk management and insurance for multi-national corporations.

### **FNA3120 Topics in Finance**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: Depends on specific topics offered

This module provides students with an opportunity for advanced study in an essential area of finance, and for studying specialized topics and new developments in the area. Topics covered will vary from semester to semester and may include new financial products and services, initial public offerings, mergers and acquisitions, venture and risk capital, and corporate governance.

### **FNA3121 Assurance and Attestation**

Modular Credits: 4

Workload: 3-0-0-3-6

Pre-requisites: FNA1002, FNA2002

This module provides the knowledge and understanding of the audit process required by assurance and attestation engagements. It aims to ensure students acquire the necessary attitude, skills, and knowledge for a career in auditing in the accounting profession or in business management.

### **FNA3122 Corporate & Securities Law**

Modular Credits: 4

Workload: 3-0-0-3-6

Pre-requisite: BSP1004

The primary aim of this course is to develop a solid understanding of the legal framework required in the operations of business entities especially companies which is essential for the functioning of an accountant. It covers the entire life-span of a business entity, namely from the formation of the entity to its liquidation. It also includes the various legal obligations and implications in operating the business entity. A secondary objective is to introduce the pertinent provisions of securities legislation such as the Securities & Futures Act and the Takeover Code.

### **FNA3123 Advanced Corporate Accounting and Reporting**

Modular Credits: 4

Workload: 3-0-0-3-6

Pre-requisite: FNA3111

This course explores in greater depth complex financial reporting topics introduced in FNA1002 Financial Accounting and FNA3111 Corporate Accounting and Reporting and it also examines issues relating to fair value accounting. The viewpoint is that of the preparer of financial statements. The discussion centres on the financial reporting issues affecting a firm's profitability and risk. This course is for students who expect to become CPAs.

### **FNA3124 Corporate Governance and Ethics**

Modular Credits: 4

Workload: 3-0-0-3-6

Pre-requisites: FNA1002, BSP1004

Corporate governance has been defined to involve "a set of relationships between a company's management, its board, its shareholders and other stakeholders [and that which] provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined" (OECD Principles of Corporate Governance, 2004). This module covers corporate governance from a multi-disciplinary perspective, including law, finance, accounting and economics, and discusses ethical dilemmas and challenges faced by managers and employees and how these can be addressed.

### **FNA3125 Risk Management**

Modular Credits: 4

Workload: 3-0-0-3-6

Pre-requisite: FNA2004, BSP1004

To provide students with the ability and competency to exercise judgement and apply techniques in risk management to matters encountered by accounting professionals at an organisational level and to react to current developments or new practice. This module covers risk management frameworks, risk management techniques and basic components of a business continuity plan.

### **FNA3126 Valuation**

Modular Credits: 4

Workload: 3-0-0-3-6

Pre-requisite: FNA2004

This module equips students with an understanding of the various valuation issues and methodologies available to accountants and managers. It specifically discusses valuation issues pertaining to the enterprise, assets for use, and liabilities. After taking this course, the student should be able to value certain classes of assets and liabilities which are of significant interest and importance to the modern business. Coverage include fair value and value-in-use concepts, earnings multiple analysis, discounted cash flow analysis and real option analysis.

### **BHT4001 Honours Thesis**

Modular Credits: 12

Workload: Vary depending on individual student with their supervisor

Pre-requisite: Vary depending on topics of research

The purpose of the Honours Dissertation is to provide the student with an opportunity to select and study a research problem of importance and present his findings logically and systematically in clear and concise prose. The research topic can be either the study of a business problem involving the use of analytic or predictive models, or a research study using field research techniques or data analysis leading to sound generalisations and deductions, or a scientific analysis of a theoretical problem. The student is expected in this exercise to demonstrate (a) a good understanding of relevant methodology and literature (b) the significance and relevance of the problem (c) a logical and sound analysis and (d) a clear and effective presentation.

#### **BCP4002 Consulting Practicum**

Modular Credits: 8

Workload: Vary depending on individual student with their supervisor

Pre-requisite: Nil

The job scope of the Consulting Practicum is part of the initial negotiations between the students and the company. They learn how to define a job scope, negotiate the resources, and negotiate the timeline and deliverables. The instructor is only involved in confirming the final agreement between the students and the company. It is an interactive process as the students have to make a preliminary survey of the company before finalizing the job scope. The project is divided into stages -- planning, research and assessment, and recommendations. It is not the same as an industrial attachment as the students take a strategic approach to dealing with a real company issue - it is a consulting project, pure and simple. It is not an academic exercise as the research is focused on real work issues. Students use their skills learnt in library work and market research.

#### **FNA4111 Research Methods in Finance**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: ST1131A and FNA3101

This is a research methodology course for BBA (Honours) students majoring in Finance. The purpose of the course is to introduce students to empirical methods of research in Finance. Topics covered include Multivariate Regression Analysis, Univariate Time Series Models, Vector Autoregressive Models, Generalized Autoregressive Conditional Heteroskedasticity, Cointegration, Regime Switching, and Generalized Methods of Moments Estimation. The course examines some applications of these methods to various research areas in finance namely, the Statistical Properties of Prices and Asset Returns, the Efficient Market Hypothesis, Predictability of Returns, Stock Market Volatility, International Stock Markets, Models of Volatility, and Asset Pricing Tests.

#### **FNA4112 Seminars in Finance**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisites: FNA3101 and FNA3102 Additional pre-requisites may apply depending on specific modules offered This module provides student with an opportunity for advanced study in an area of finance. The topics covered will vary from semester to semester. Possible topics include finance theory and empirical research in finance.

#### **FNA4113 Accounting Theory**

Modular Credits: 4

Workload: 3-0-0-3-6

Pre-requisite: FNA1002 and FNA3111

Co-requisite: FNA3123

Accounting theory is a body of rules and theories which governs the practice of financial accounting. Many of the rules and theories are well reasoned economic rationales and tested over time. On the other hand, the state of accounting theory also changes as new accounting and financial transactions are created in the new economy. This module seeks to examine some of the core theories that underpin financial accounting. This is essential to a proper theoretical understanding of the discipline of financial accounting.

#### **FNA4114 Advanced Taxation**

Modular Credits: 4

Workload: 3-0-0-3-6

Pre-requisite: BSP3512

This module provides students with basic grounding in tax planning. Part 1 discusses tax planning opportunities for the business entity in a local (Singapore) context, by making use of available tax incentives, different business structures, etc. Part 2 covers tax planning in an international business context, and will deal with double tax agreements, choice of foreign investment vehicles, repatriation of income and capital, tax havens, tax arbitrage, etc. Part 3 deals with tax planning for the individual operating across international boundaries.

### **FNA4115 Advanced Assurance and Attestation**

Modular Credits: 4

Workload: 3-0-0-3-6

Pre-requisite: FNA3121

To equip students with a good understanding of the theoretical and practical knowledge/techniques for a variety of assurance and attestation work other than the statutory audit. Such work are often more complex and require advanced methodologies.

## **4 Department of Management And Organisation**

### **MNO1001 Management and Organisation**

Modular Credits: 4

Workload: 2-1-0-4-3

Pre-requisite: Nil

This module addresses the essence of what managers do. To understand this, we begin by focusing on the two basic building blocks in organisations; the individual and the group. The broader environment in which managers and organisations will also be addressed. Lectures, case studies and experiential learning are used as tools for learning when appropriate.

### **MNO2302 Human Resource Management**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: MNO1001

This module introduces students to the fundamentals of human resource management (HRM), and it provides a foundation for more advanced modules that focus on specific aspects of HRM. It aims to provide students with general understanding of the core areas of HRM, including HR planning, job analysis, recruitment and selection, performance management, training and development, compensation, employee relations, and HRM in an international context. These issues will all be addressed from the perspective of general managers, HRM specialists, and individual employees. Students will be challenged to consider the implications of integrated HR systems, as well as specific HRM policies and implementation procedures, for individual and organisational performance. They will also consider the practical implications of the changing nature of work and the employment relationship.

### **MNO2311 Leadership in Organisation**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: MNO1001

Leadership is a multi-faceted phenomenon. This course will look at leadership from the perspective of the leader, the situation, and the followers to derive a more complete understanding of what leadership is all about. The final objective is to help students to be more effective leaders taking all the relevant contextual factors into consideration.

### **MNO3301 Organisational Behavior**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisites: MNO1001

This course deals with the study of human behavior in organisations: how people influence organisational events and how events within the organisation influence people's behavior. Organisational behavior is a field that draws ideas from psychology, social psychology, sociology, anthropology, political science, and management and applies them to the organisation. The field of organisational behavior covers a wide range of topics: organisational culture, motivation, decision making, communication, work stress and so on. In the end, the field of organisational behavior asks two questions: (1) Why do people behave as they do within organisations? (2) How can we use this information to improve the effectiveness of the organisation?

### **MNO3303 Organisational Effectiveness**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: MNO1001

This course aims to introduce students to the field of organisational theory – which applies concepts from various disciplines such as management studies, sociology, psychology, political sciences and economics to study organisations. The course is designed to encourage students to actively and critically use these concepts to make

sense, diagnose, manage and respond to the emerging organisational needs and problems. The course covers topics such as organisational goals, strategy and effectiveness; dimensions of organisational structure; organisational design and environments; technology and organisational change; and organisational decision-making. The emphasis of this course is on the practical value of organisation theory for students as future members and managers of organisations. Developing an understanding of how organisations (should) operate is critical so that students will be able to effectively fulfill their roles as future managers.

### **MNO3311 Managing Diversity in S.E. Asia**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: MNO1001

The objective of this module is to demonstrate the complexity of culture and its significance for the conduct of business. It develops cultural knowledge, sensitivity and skills necessary for working in the diverse cultural environments of the S.E. Asia countries. After completing this module, students should be able to understand the impact of culture on management practices in S.E. Asia.

### **MNO3312 Organisational Communication**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: MNO1001

This course introduces an integrative perspective of organisational communication that focuses on the role of information and communication in organisational processes. The module emphasises theoretical issues as well as practical analysis. It explores the ways to establish proper networks, and examines approaches for effective internal and external communication in the context of today's changing social patterns, the increasing diversity of the workforce, the proliferation of new communications technologies, and the challenges of global integration and competition. Students will discuss the basic relationships among communication, information and organisation; and will examine the pervasive adoptive organisational functions of communication in modern organisations.

### **MNO3313 Topics in Management and Organisation**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisites: MNO1001 Additional pre-requisites may be required depending on the topic

The topic(s) addressed in this module will involve specialised issues that are worthy of more in-depth treatment than what is provided in the other modules. The specific topics may range from current theoretical debates to the strategies and tactics that are utilized by leading organisations to resolve practical problems. The primary mode of instruction will feature discussion of research articles, case studies and/or projects involving practical applications.

### **MNO3314 Social and Ethical Issues in Management**

Modular Credits: 4

Workload: 1-2-0-1-6

Pre-requisites: MNO1001

This module will develop students' abilities to recognize and think critically about difficult ethical and social dilemmas in organizational life and about managerial and corporate behaviour. Some examples of topics that will be covered are: diversity and discrimination, employee rights, cultural differences in moral standards and respect for the social context in which organizations operate. Several different theoretical perspectives will be adopted, including values and culture, decision-making and philosophical and normative frameworks. The module is intended for students in their third year of study.

### **MNO3315 Legal Issues in Employee Management**

Modular Credits: 4

Workload: 3-0-0-0-7

Pre-requisites: MNO1004

With rising awareness and salaries there are more and more legal disputes between employers and employees. This course introduces the boundaries of what an employer or employee can legally do and not do. This course would be relevant to students who intend to specialize in human resource management or who intend to set up their own businesses. Of course, if a legal dispute arises, legal advice may be sought. However, this may be too late. By knowing the basics of employment law managers would be able to take a proactive approach and avoid legal problems from arising in the first place. This course will also be of general relevance as in all likelihood students would be employees some day and it would be wise for them to be aware of their rights and liabilities as an employee.

### **MNO3316 Managing an International Workforce**

Modular Credits: 4

Workload: 3-0-0-4-3

Pre-requisites: MNO1001 and MNO2302

An organization's ability to succeed in international business activities depends, to a great extent, on its ability to develop and effectively manage its international human resources. Students in this module will consider how improvements in the selection, orientation and training and compensation of employees who are on international assignments can result in improvements in the employees' performance, and an enhancement of the organization's international capabilities. Besides considering how international assignments – to and from the parent company – can contribute to coordination and organizational learning, students will also consider the opportunities that are available to the host country personnel of foreign MNCs.

### **BHT4001 Honours Thesis**

Modular Credits: 12

Workload: Vary depending on individual student with their supervisor

Pre-requisite: Vary depending on topics of research

The purpose of the Honours Dissertation is to provide the student with an opportunity to select and study a research problem of importance and present his findings logically and systematically in clear and concise prose. The research topic can be either the study of a business problem involving the use of analytic or predictive models, or a research study using field research techniques or data analysis leading to sound generalisations and deductions, or a scientific analysis of a theoretical problem. The student is expected in this exercise to demonstrate (a) a good understanding of relevant methodology and literature (b) the significance and relevance of the problem (c) a logical and sound analysis and (d) a clear and effective presentation.

### **BCP4002 Consulting Practicum**

Modular Credits: 8

Workload: Vary depending on individual student with their supervisor

Pre-requisite: Nil

The job scope of the Consulting Practicum is part of the initial negotiations between the students and the company. They learn how to define a job scope, negotiate the resources, and negotiate the timeline and deliverables. The instructor is only involved in confirming the final agreement between the students and the company. It is an interactive process as the students have to make a preliminary survey of the company before finalising the job scope. The project is divided into stages -- planning, research and assessment, and recommendations. It is not the same as an industrial attachment as the students take a strategic approach to dealing with a real company issue - it is a consulting project, pure and simple. It is not an academic exercise as the research is focused on real work issues. Students use their skills learnt in library work and market research.

### **MNO4311 Organisations and their Environments**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: MNO1001

This course introduces students to recent organisation insights that emphasize an organisation's environment rather than its work activities as the primary determinants of organisational structure. The course examines three perspectives: resource dependency theory, institutional theory, and organisational ecology theory. It focuses on the way environments effect organisations in terms of structures and actions, and it attempts to address a number of perplexing issues such as: (a) Why are there so many forms of organisations? And is there one best form? (b) Among organisations of a particular form, why are there so many similarities in structure and operation? (c) Why do some organisations persist in operations that are obviously ineffective and inefficient? (d) Why do most organisations not follow strategists' seemingly simple advice to adapt and innovate? (e) Why do some organisations persist in relationships with other organisations that are not in their best interest?

### **MNO4312 Research Methods in Management and Organisation**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisite: MNO1001 and ST1131A

This module is designed to equip with basic knowledge on how to conduct research. Major topics covered include understanding and formulating research problems, the nature of causation in social research, choice of research design, conceptualisation and measurement, operationalisation of constructs, appreciation and construction of selected sociometric scales and indices, data collection and analysis, and preparation of research reports. When necessary, additional topics will be introduced depending on the needs of students and staff expertise.

### **MNO4313 Seminars in Management and Organisation**

Modular Credits: 4

Workload: 3-0-0-4-4

Pre-requisites: MNO1001 Additional pre-requisites may apply depending on the specific modules offered

Current issues and/or essential topic areas within the field of management and organisation that merit extensive literature reviews and scholarly discussion will be studied under this heading. Students enrolled in these seminars are required to make presentations on topics that are of interest to them and relevant to the module. Lecturers will act as facilitators, evaluators and resource persons. Assessments will be based on a major project or term paper, in addition to more traditional indicators of performance. Examples of seminars in the Management and Organisation concentration are International and Comparative Industrial Relations; Leadership in Organisation; Comparative and Cross-National Study of Organisations and Power and Politics in Organisations.

## **4.1 Human Resource Management Unit**

### **HR2002 Understanding Human Relations in the New Economy**

Modular credits: 3

Workload: 3(sectional)-0-0-4-3

Prerequisite: For Engineering students

Preclusions: Students who have passed or are reading HR2001 or HR2101 or HR3111 are not allowed to take HR2002

This multi-disciplinary course in human relations management invites students to look, from different perspectives, at some major themes that constitute various challenges in the new economy. Students are led to examine the significance of social influences on individual behavior, thoughts and feelings. This theme is taken through to an exploration of 'emotions' and 'diversity' as social phenomena central to understanding and managing human relations at work. In the light of these, various aspects of the employment relationship are discussed. Through this thematic approach, students are also able to gain some insights into such group dynamics as communication, teamwork and motivation.

### **HR3003 Management and Human Relations**

Modular credits: 4

Workload: 3(sectional)-0-0-4-3

Prerequisite: For School of Design and Environment students

The Management and Human Relations module for School of Design and Environment focuses on individual's role and responsibility in being an effective member at the workplace. Topics such as understanding the self and interpersonal interactions, interpersonal communication, motivation and influencing individuals, team dynamics and career management are introduced and explored.

### **Professional Education Courses offered by HRM Unit**

With a rapidly-changing macro-environment, increased demands of customers, and new technology, today's professional faces numerous challenges. In the context of these changes, we offer customized courses to students of different schools viz. Medicine and Dentistry based on their changing roles and unique needs. Our professional courses endeavour to develop the interpersonal skills and managerial competencies of these new professionals in various areas, from their interaction with customer/patient or relationship with their coworkers/team, to the management of emotions, to the development of communication skills.

The various professional courses offered by the HRM Unit are:

**HR2307** – The HRM course for medical students conducted by the Unit in collaboration with the Faculty of Medicine as part of the Professional Development & Communication Programme (PDCP), aims to develop self-management skills, communication, empathy and increased diversity competence in the future medical workers.

**HR3304** - The Human Relations Management course for Faculty of Dentistry leads students to examine the significance of self-awareness, empathic communication, management of emotions, building trust and teamwork and related skills in the practice of dentistry.

## **5 Department of Marketing**

### **MKT1003 Principles of Marketing**

Modular Credits: 4

Workload: 2-1-3-3-2

Pre-requisite: Nil

This module is designed to provide knowledge, techniques and understanding of marketing principles. It provides students with a conceptual framework to analyse and interpret marketing phenomena and to suggest courses of action in response to marketing problems. It covers topics such as the marketing concept, the marketing environment and the marketing mix which includes product, pricing, distribution and promotion.

Other related topics include consumer behaviour, market segmentation and targeting, marketing research and information system, marketing planning, implementation and control, and public issues in marketing. This is a foundation module for business students and provides the basis for later concentration in the marketing area.

### **MKT2401 Asian Markets and Marketing Management**

Modular Credits: 4

Workload: 3-0-0-6-3

Pre-requisite: MKT1003

The primary objective of this module is to acquaint students with the marketing planning and marketing management process; with a focus on Asian markets. Students are encouraged to apply marketing concepts, tools and techniques in the analysis of marketing situations and problems that are commonly faced in Asian markets and in the development of marketing strategies and programmes that are appropriate for Asian markets.

Topics include the roles of planning in marketing, the reasons for planning, the pitfalls in planning, environmental analysis, market analysis, customer analysis, competitive analysis, company analysis, SWOT analysis, issue analysis, objective setting, strategy development, assembling of marketing mix, marketing implementation and control, and marketing evaluation and audit.

The module is taught with a practical and applied orientation. Asian cases are used to a large extent for class discussion, supplemented by computer simulated marketing games, projects, exercises and lectures.

### **MKT2411 Retail Entrepreneurship**

Modular Credits: 4

Workload: 3-0-0-4-3

Pre-requisite: MKT1003

The course will introduce retail marketing concepts covering both the mechanics and management of retailing from an entrepreneurial perspective. A range of topics, including the role and tasks of an entrepreneur, store and non-store retailing, location and site selection, retail environment and the application of new technologies, retail marketing mix components (such as merchandising, pricing and margin planning, store management, layout and visual merchandising), as well as internal and external promotions will be covered. In addition, short case studies and projects will be used to supplement lectures and readings. Students will acquaint themselves with current and future retailing environments and developments in Singapore and other countries as well as the processes that go on behind the scenes in retailing. While the module will cover theories in retail marketing discipline, it is generally approached with a practical and applied orientation. Lectures will be supplemented with store visits, video clips and talks. Students will also get a chance to learn about assessing retail outlets and developing retail strategies for real-life businesses through hands-on projects. By the end of the course students should be equipped with the knowledge and skills necessary to start up a retail business. Aside from business students who are interested in retailing, this course is targeted at students who are enterprising and may aspire to start their own retail business in the future.

### **MKT2412 Global Marketing**

Modular Credits: 4

Workload: 3-0-0-5-3

Pre-requisite: Nil

This course aims to provide students with an understanding of the complex issues generally encountered when marketing goods and services internationally. Topics to be covered include: the culture, economic, political and legal environments within which global marketing take place; processes involved in assessing globe market opportunities; developing global marketing strategies: product policy, promotion, channel management and logistics; implementing global marketing strategies.

Students will be required to conduct a real-life project on the marketing of a specific good or service to another country from Singapore. In this project, they will be asked to assess the marketing environment, identify the marketing opportunities, select the target market segment and advise a marketing plan. In this project, students will also learn how to use the internet to search for country information.

### **MKT2413 Marketing Research**

Modular Credits: 4

Workload: 3-0-0-5-3

Pre-requisite: Nil

Effective marketing research is necessary for successful management of all phases of the marketing process, ranging from product development and introduction to selling through growth and maturity stages. In today's information-oriented environment, a marketing manager cannot succeed without a thorough understanding of the research process. By understanding the research process, he can better judge the suitability, reliability and the validity of a research study in his decision-makings.

Students will learn by doing in this course. While we will use class time to discuss appropriate research topics, students are required to do lots of activities by themselves in order to facilitate their learning by doing. In doing so, this course incorporates an experimental element in marketing research and consulting. As a marketing information provider, students will be assisting a firm by collecting and interpreting market data as a means toward the development of a superior marketing plan. At the same time, students will conduct tutorial activities that will provide opportunities for students to practice the key topics covered in the class.

This course is intended to acquaint students with the fundamental marketing research process. More specifically, this course aims:

To familiarise the student with the fundamental marketing research skills of problem formulation, research design, questionnaire design, data collection, data analysis, and report presentation and writing.

To have the student gain perspective and practice in applying these skills through a research project.

To develop an understanding of decision making in marketing, its inherent difficulties and pitfalls and the importance of information in marketing research.

### **MKT3402 Consumer Behaviour**

Modular Credits: 4

Workload: 3-0-0-5-3

Pre-requisite: MKT1003

This module provides an overview of consumer behaviour theories, research, and applications. It is designed to develop knowledge and skills that will facilitate an understanding of buyer behaviour which can be integrated into the formulation of marketing strategies. This will be accomplished by surveying the social science underpinnings of consumer behaviour as well as various types of consumer research which may be valuable for specific marketing decisions. The module thus emphasizes the content and logical application of theories and research in analysing consumer behaviour for solving marketing management problems.

### **MKT3412 Services Marketing**

Modular Credits: 4

Workload: 3-0-0-5-3

Pre-requisite: MKT1003

This module applies marketing principles to service organisations both in the private and public sectors. Students will be taught the unique characteristics that separate services from goods, the managerial problems stemming from these characteristics, and the strategies suggested as appropriate to overcome the problems.

Case studies will be used in addition to lectures in conducting this module and students may also be required to complete a project concerning the marketing of services.

### **MKT3413 SME Marketing Strategy**

Modular Credits: 4

Workload: 3-0-0-4-3

Pre-requisite: MKT1003

This course focuses on the development and application of marketing strategies for entrepreneurs, start-up firms, and small and medium sized enterprises (SMEs), taking into account specific constraints faced by these set-ups. The major topics covered are:

Understanding constraints of SMEs

Critical evaluation of extant analytical tools and strategic prescription for SME marketing

Game theoretic applications in the formulation of SME's marketing strategies

Developing a formal decision framework for SME's marketing strategies

One unique feature of this course is that students will work, either individually or as a group, with an entrepreneurship, start-up firm, or an SME during the duration of the course to get a first-hand experience of running such an organisation.

#### **MKT3414 Marketing Channels**

Modular Credits: 4

Workload: 3-0-0-5-3

Pre-requisite: MKT1003

The objective of the module is to provide students with an understanding of the environment, issues and decision-making tools associated with the distribution of goods and services in marketing. Topics include distribution of goods through appropriate use of channels: types of distribution channels and salespeople; organising and developing the selling and distribution effort; inter-organisational exchange behaviour; dimensions of conflict and cooperation among channel members; ways of rationalizing relationships between channel members; development of effective marketing programmes by retailing and wholesaling members; management of marketing channels by manufacturing firms.

This course integrates the basic marketing principles, logistics issues, behavioural concepts, and analytical tools into the decision process underlying distribution through marketing channels. The marketing organisations involved in distribution are identified, and their roles and functions analysed. Product flows through the various kinds of channels and channel members are studied, the nature of channel planning and control is discussed, and characteristic channel problems are analysed. The course adopts a holistic, systems approach in discussing the various issues pertaining to distribution and channels.

#### **MKT3415 Internet Strategy and Marketing**

Modular Credits: 4

Workload: 3-0-0-5-3

Pre-requisite: MKT1003

This course is designed to wire the students to the digital economy and provides students with Web tools and e-marketing knowledge to compete effectively in the e-business world. Emphasis will be placed on tapping the enormous potential of the Internet as a new marketing medium and exploring the unique characteristics of computer-mediated marketing environments that distinguish them in significant ways from traditional, terrestrial markets of opportunity. Course content includes detailed assessment of issues related to: information economy, e-marketing research, shopping bots and consumer behavior, permission marketing and viral marketing, Internet shopping and e-tailing models, auctions and affiliate marketing, Net community and CRM (customer relationship management), clickstream analysis and online personalisation, and public policy and e-business ethics.

#### **MKT3416 Business Marketing**

Modular Credits: 4

Workload: 3-0-0-5-3

Pre-requisite: MKT1003

This course seeks to acquaint participants with the basic concepts, tools and frameworks in business-to-business marketing. Participants are exposed to the unique challenges in operating in the business market and provided with opportunities to carry out marketing analyses and to make marketing decisions in the business marketing context.

The topics to be covered are: (a) importance and unique aspects of business marketing, (b) business buying behaviour, (c) business market analysis and competitor analysis, (d) business market strategy formulation, (e) business product management, (f) business pricing strategies and decisions, (g) management of distribution channels in the business market, (h) management of salesforce in the business market, (i) development and maintenance of customer relationships in the business market, (j) customer negotiations in the business market, and (k) marketing communications in the business market.

This course will be taught in an application-oriented fashion. The various business marketing management concepts and principles will be taught through brief lectures, class discussions, class exercises and videos. The participants will learn how to make business marketing decisions, solve business marketing problems and develop business marketing plans through individual analysis and class discussion of marketing cases as well as group involvement in a business marketing project or simulation.

#### **MKT3417 Customer Asset Management**

Modular Credits: 4

Workload: 1-2-0-4-3

Pre-requisite: MKT1003

Customer Asset Management focuses on acquiring, retaining, and winning back customers. It highlights the need to move from merely satisfying customers to building strong bonds with them. Apart from the theoretical perspectives, this course also utilizes a software to analyse customer purchase data so as to differentiate customers and develop different relationship strategies for different customer groups.

#### **MKT3418 Product & Brand Management**

Modular Credits: 4

Workload: 3-0-0-5-3

Pre-requisite: MKT1003

This module aimed at developing skills towards the management of new and existing products, where products cover both tangible goods as well as intangible services. Possible topics to be covered include: the changing role of the product manager; product portfolio management; product planning and concept testing; test marketing and new product introduction; and packaging. Several teaching methods will be used. Apart from lectures, students may be given assigned readings and cases to develop their skills. In addition, students may have the opportunity to apply their skills in group projects.

#### **MKT3420 Promotional Management**

Modular Credits: 4

Workload: 3-0-0-5-3

Pre-requisite: MKT1003

This module focuses on the use of communication to influence consumer decision making. The module will address the principles and practice of advertising, sales promotion, personal selling and public relations. Possible materials to be covered include setting promotional objectives; copy development and execution; media decisions; consumer and trade promotion; and sales force management. In addition to lectures, students will also be exposed to published research in promotion. Case studies as well as group projects involving the development and execution of a promotional campaign may also be used to allow students apply their knowledge and skill.

#### **MKT3421 Marketing Methods and Applications**

Modular Credits: 4

Workload: 3-0-0-5-3

Pre-requisite: MKT1003

This course deals with concepts, methods, and applications of decision modeling to address such marketing issues as segmentation, targeting and positioning, new product design and development, advertising, sales force and promotion planning, and sales forecasting. The course is designed for students who have extensive background in or understanding marketing research and marketing principles, and who know or are prepared to learn to build "smart" spreadsheets in EXCEL.

This course will attempt to provide skills to translate conceptual understanding into specific operational plans--a skill in increasing demand in corporations today. Using market simulations and related exercises tied to PC-based computer software, students will develop marketing plans in varying decision contexts.

Specifically, the course objectives are to:

Provide students with an understanding of the role that analytical techniques and computer models can play in enhancing marketing decision making in modern enterprises.

Expose students to numerous examples demonstrating the value of the analytic approach to marketing decision making.

Provide students with the software tools that will enable them to apply the models and methods taught in the course to real marketing problems.

Improve students' skill in viewing marketing processes and relationships systematically and analytically.

#### **MKT3422 Topics in Marketing**

Modular Credits: 4

Workload: 3-0-0-5-3

Pre-requisite: Depends on specified topics offered

This module provides students with an opportunity for advanced study in one or more specialised areas in marketing, which is not explicitly covered in other marketing electives in the programme. Topics include, but are not restricted to, services and non-profit marketing, sales force management, industrial marketing strategy, and brand management.

#### **MKT3513 Game Theory and Strategic Analysis**

Modular Credits: 4

Workload: 3-0-0-4-3

Pre-requisite: Nil

This course is an introduction to game theory and its applications in the realm of business. It aims to provide an overview of non-cooperative and cooperative games through the analysis of strategic interactions in conflict situations such as bargaining, market competition, monetary policy, auction, international trade, to name a few. Recurring themes include threatening and bluffing, punishing and rewarding, building reputations, and sustaining cooperation in non-cooperative environments through repeated interactions. More advanced topics on games with incomplete information such as moral hazard and incentives theory, mechanism design and the Revelation Principle will also be covered.

#### **BHT4001 Honours Thesis**

Modular Credits: 12

Workload: Vary depending on individual student with their supervisor

Pre-requisite: Vary depending on topics of research

The purpose of the Honours Dissertation is to provide the student with an opportunity to select and study a research problem of importance and present his findings logically and systematically in clear and concise prose. The research topic can be either the study of a business problem involving the use of analytic or predictive models, or a research study using field research techniques or data analysis leading to sound generalisations and deductions, or a scientific analysis of a theoretical problem. The student is expected in this exercise to demonstrate (a) a good understanding of relevant methodology and literature (b) the significance and relevance of the problem (c) a logical and sound analysis and (d) a clear and effective presentation.

#### **BCP4002 Consulting Practicum**

Modular Credits: 8

Workload: Vary depending on individual student with their supervisor

Pre-requisite: Nil

The job scope of the Consulting Practicum is part of the initial negotiations between the students and the company. They learn how to define a job scope, negotiate the resources, and negotiate the timeline and deliverables. The instructor is only involved in confirming the final agreement between the students and the company. It is an interactive process as the students have to make a preliminary survey of the company before finalizing the job scope. The project is divided into stages -- planning, research and assessment, and recommendations. It is not the same as an industrial attachment as the students take a strategic approach to dealing with a real company issue - it is a consulting project, pure and simple. It is not an academic exercise as the research is focused on real work issues. Students use their skills learnt in library work and market research.

#### **MKT4411 Marketing Strategy**

Modular Credits: 4

Workload: 3-0-0-5-3

Pre-requisite: MKT2401

This is an advanced module in strategic marketing and covers the three areas of marketing strategy, marketing planning and marketing management and their inter-relationships. The perspective taken is that of a Chief Executive Officer looking at overall marketing issues and problems at the corporate and business unit levels. The module will cover the process, tools, and models of strategic analysis and their application for the development of marketing module will judiciously synthesize the twin areas of analytic approaches to strategy development and managerial approach to marketing decision making. The pedagogy therefore uses a combination of theory and models on the one hand and complex managerial case situations on the other to develop balanced marketing strategists comfortable with both marketing science and marketing decision making.

#### **MKT4412 Marketing Theory & Research**

Modular Credits: 4

Workload: 3-0-0-5-3

Pre-requisite: MKT2401

This course aims to acquaint students with academic research in various areas of marketing. To achieve this goal, students will be required to read and discuss several assigned articles each week. These articles are designed to equip students with a working knowledge of the current literature in marketing research. Through this process, students will hopefully acquire critical thinking skills to carefully appraise, rather than blindly accept, a piece of research. In addition, students will be required to exercise their creative and analytical abilities in developing, implementing, and presenting a research project on a group basis.

#### **MKT4413 Pricing Models and Strategy**

Modular Credits: 4

Workload: 3-0-0-5-3

Pre-requisite: MKT2401

Pricing is one of the important decisions that a marketing manager must make. In fact a firm's profitability critically depends on how its products or services are priced. Pricing decisions however are difficult to make and can be quite complex. Effective pricing decisions draw upon a variety of disciplines such as economics, marketing, psychology and law. The purpose of the course will be to introduce students to some of the key concepts and practical issues involved in making effective pricing decisions.

**MKT4415 Seminars in Marketing**

Modular Credits: 4

Workload: 3-0-0-5-3

Pre-requisites: Vary from term to term depending on specific topics offered

This module will furnish an in-depth treatment of one or more areas in marketing. Intensive class participation and discussion of research articles will be the mode of instruction. Topics will range from, but are not restricted to, advanced marketing research, marketing theory, philosophy of marketing science, and marketing decision models.

## **Descriptions For Technoprenurship Programme Minor Modules**

### **TR2201 ENTREPRENEURIAL MARKETING**

Modular Credits: 4

Workload: 3-0-0-3-4

Preclusion: TR3003 & MKT1003

Description: This course is designed to introduce students to the core concepts of marketing, with a special emphasis on the marketing of new, innovative products and services where no market previously existed or where the underlying product concepts may be unfamiliar to existing customers. The pedagogical approach emphasizes those market research methods, marketing strategies, pricing analysis and promotional techniques that are particularly useful for entrepreneurial settings. Particular attention is paid to the innovative use of internet as well as non-conventional techniques such as "guerilla" marketing. The usefulness of these analytical tools is illustrated through concrete case studies of successful entrepreneurial marketing.

### **TR2202 TECHNOLOGICAL INNOVATION**

Modular Credits: 4

Workload: 3-0-0-3-4

Description: This course helps students build a strong conceptual foundation for understanding technological innovation. The dynamics of technological change are explored through concepts such as technological dominant designs, disruptive technologies and diffusion curves. Students will learn the process through which an innovative idea is transformed into a marketable product or service, as well as the organizational and strategic factors that influence this process. These include ways to encourage risk-taking and creativity, discover market opportunities, protect intellectual property, attract resources, nurture entrepreneurial leadership, and overcome resistance to change. These concepts are brought to life using case studies, videos and guest speakers.

### **TR3001 NEW PRODUCT DEVELOPMENT**

Modular Credits: 4

Workload: 3-0-0-3-4

Description: This course focuses on the integration of the marketing, design, and manufacturing functions of a company to create products that meet market demand. Topics covered in the course include development processes and organizations, product planning, identifying customer needs, product specifications, concept development, product architecture, industrial design, design for manufacturing, prototyping, product development economics, and managing projects. The students are required to complete a group product development project. The course is targeted at undergraduate students in the Technoprenurship Minor Program.

### **TR3002 NEW VENTURE CREATION**

Modular Credits: 4

Workload: 3-0-0-3-4

Prerequisites: TR2201, TR2202

Preclusion: TR3004, TR3005

Description: This course aims to equip students with the knowledge and tools required to start their own successful scalable business. Students learn through developing a business idea and business plan and presenting it to a panel of judges at the end of the course. Major topics covered include: idea generation and evaluation, value proposition, market analysis, sustainable competitive advantage, marketing strategy, creative problem-solving, innovation, teams, legal issues, financing, valuation and forecasting, managing growth, going global, negotiation and presentation. The course is targeted at all students who are interested in learning how to start a scalable business.

### **TR3003 GLOBAL ENTREPRENEURIAL MARKETING**

Modular Credits: 4

Workload: 3-0-0-4-8

Preclusion: TR2201

Description: This course is designed to equip an engineer with the marketing skills needed to launch and lead a high-growth, high-tech venture. Covers marketing challenges facing entrepreneurs who expand internationally early in the life of the company. Combines learning by the case method, working in teams, and a field based entrepreneurial project. Bases 50% of grade on team performance, to cultivate entrepreneurial leadership and teamwork skills.

For the NUS College in Silicon Valley (NCSV) program.

### **TR3004 ENGINEERING ENTREPRENEURSHIP I(C)**

Modular Credits: 4

Workload: 3-0-0-0-7

Prerequisite: TR3002

Description: Designed specifically for engineers and scientists having a passion for technological innovation, this popular course focuses on the roles of inventors and founders in successful high-tech ventures. This course describes the entrepreneurial process for taking a technology concept from the idea stage to the market. It will provide an understanding of the sequential stages of the entrepreneurial startup, the post-startup issues of growth in the emerging stage of a technology venture, and the eventual decision to harvest personal financial reward. For the NUS College in Bio Valley (NCBV) program.

### **TR3005 ENGINEERING ENTREPRENEURSHIP II**

Modular Credits: 4

Workload: 3-0-0-0-7

Prerequisites: TR3004

Prerequisite: TR3002

Description: This course will describe the process and skills involved in the development of a comprehensive business plan for a startup technology venture. Whereas the prerequisite course, TR3004, introduced the sequential stages of engineering entrepreneurship from the initial idea through venture startup, its emerging stage and ultimately "harvesting," this course provides a much more detailed treatment of the business startup phase for those students who wish to pursue the topic further. Student teams will each prepare an in-depth business plan for a technology venture opportunity. At the end of the term, the plans are presented to a distinguished panel of investors, entrepreneurs and advisers.

For the NUS College in Bio Valley (NCBV) program.

### **TR3006 HIGH-TECH PRODUCT AND MARKET DEVELOPMENT**

Modular Credits: 4

Workload: 6-0-0-4-5

Prerequisites: TR3004

Prerequisite: TR2201, TR3001, TR3003

Description: This course will focus on important aspects of engineering entrepreneurship surrounding marketing and product development. Topics include technology startup brand and product positioning development; Methods of market analysis with emphasis on technology startup; Targeting opportunities for new product development; The product development process; and Integrating marketing and product development strategies within the broader entrepreneurial process. The course will use case studies as well as in depth analyses of several technology market segments. Assignments and projects will include producing and presenting a marketing study and a product development plan.

For the NUS College in Bio Valley (NCBV) program.

### **TR3007 ENTREPRENEURIAL FINANCE**

Modular Credits: 4

Workload: 2-1-0-3-4

Prerequisites: Nil

Prerequisite: Nil

Cross-listing: Nil

Description: This course aims to discuss the structure, environment and risk management of entrepreneurial investments in business start-ups. There will be a comprehensive introduction of entrepreneurial investments, from combined investment options to focused investments, and other different processes based on real-life and theoretical basis. This course focuses on both the theoretical and practical aspects of entrepreneurship investment. Case study analysis and comparison of local and international environment of venture capital investment would be the primary focus. This eventually leads up to a discussion of the construction of an entrepreneurship investment system which is appropriate and relevant to a particular country.

For the NUS College in Shanghai (NCS) program.

### **TR3009 NEW VENTURE CONSULTING PRACTICUM**

Modular Credits: 4

Workload: 2-0-0-4-4

Prerequisites: TR2201 Entrepreneurial Marketing; or TR2202 Technological Innovation Year 3 and Year 4 students

Description: This course provides students with knowledge of the important elements in management consulting and the opportunity to work on real-life projects offered by start-ups or new business development units of established firms. Students will learn how to define the problems, search for relevant information and resources, conduct analysis, present their findings and recommendations. The final output of this module will be a consulting report presented to the entrepreneur or management of the new venture client.

### **TR3010 IDEATION – CREATING A BUSINESS IDEA**

Modular Credits: 6

Workload: 5-0-0-8-15

The module is a fundamental part of the entrepreneurship learning process of the NUS Overseas Colleges program. Offered by the Stockholm School of Entrepreneurship, the course challenges the students to identify areas of need, to find and create business ideas, and to develop business concepts and opportunities.

The module is aimed at equipping students with knowledge on the process of creating and developing a business opportunity. The course covers pre-idea to creation of the business idea, identification of market demand, conducting of competitive analyses and study of relevant issues affecting the actual launching of the product/service. Real life examples will be used for more effective learning.

### **TR3011 PLANNING – DEVELOPING A VENTURE**

Modular Credits: 6

Workload: 4-0-0-16-8

The module is taught as part of continual learning following its preceding module "Ideation – Creating a Business Idea". The two modules provide the fundamentals of an entrepreneurship education which the NUS Overseas Colleges program is designed to achieve. Offered by the Stockholm School of Entrepreneurship, the course resolves to bring participating students through a business development process from the development of an idea to the final business plan.

### **TR3101 INTERNSHIP CONTINUOUS ASSESSMENT**

Modular Credits: 4

Workload: 0-0-0-5-5

Description: The module forms an integral part of the structured learning for the internship program at NUS Overseas Colleges. Students will keep a logbook to regularly document their work experience, lessons learned and new ideas/insights generated in the course of their internship. The logbook will be used as the basis for regular interaction and discussion between the students and their assigned mentors/advisors. Students will also be required to share their learning experience with their peers in the NOC program at regular intervals throughout their internship.

For the NUS Overseas Colleges (NOC) program.

### **TR3102 INTERNSHIP PROGRAM REPORT**

Modular Credits: 8

Workload: 0-0-0-4-16

Prerequisites: TR3101 (concurrent)

Description: Students spend a year in an overseas high tech start-up company as interns, which provides them an opportunity to experience working and learning in the entrepreneurial environment of a start-up in Silicon Valley/ Bio Valley. Students will prepare a final report summarizing the specific entrepreneurial skills and business/ management knowledge they have learned through the internship program.

For the NUS Overseas Colleges (NOC) program.

### **TR3103 START-UP BUSINESS CASE**

Modular Credits: 8

Workload: 0-0-0-18-2

Description: The module forms part of the structured learning for the internship program at NUS Overseas College at Silicon Valley/ Bio Valley. It is targeted at students undergoing internship at start-up companies in the Silicon Valley/ Bio Valley, and it involves writing a business case on the start-up process and challenges faced by the companies. It is intended to be a channel for (a) the application of concepts and frameworks learned in Technopreneurship courses to document the key process and challenges faced by real companies, (b) sharpening student's observation, learning by questioning, and raising awareness of the broader business and strategic context, and (c) documentation of application of learning. Selective cases written by the students may be used as teaching cases.

For the NUS Overseas Colleges (NOC) program.

### **TR4001 GLOBAL ENTREPRENEURIAL LEADERSHIP**

Modular Credits: 4

Workload: 1.5-0-1-3.5-4

Description: Participants will be exposed to best-of-class lessons from entrepreneurs and thought leaders in Sweden, Singapore, and Silicon Valley. Students from NUS, KTH, and Silicon Valley will compare and contrast the lessons of entrepreneurial leaders in all three regions. Participants will develop a personal philosophy and code of conduct for themselves as the next generation of entrepreneurial leaders. They will develop their skills as global

entrepreneurs, preparing them to more effectively collaborate with entrepreneurs and members of the Circles of Influence in other high tech regions around the world. Members of all three learning groups will develop their professional global networks.

For the NUS College in Silicon Valley (NCSV) program.

#### **TR4201 TECHNOLOGY COMMERCIALIZATION**

Modular Credits: 4

Workload: 6-0-0-2-4

Prerequisites: Basic course in economics

Description: A team-based course that teaches the student teams the techniques for assessing commercial viability of selected patented technologies provided by technology licensing offices of participating U21 member universities, and the process of developing technology commercialization plans appropriate for the given technologies. Students learn to work in cross-disciplinary and cross-cultural teams to better understand the global dimensions of technology commercialization. The course is open to upper level undergraduate students from U21 member universities. The ideal mix is to have students from both scientific/technical disciplines as well as students from business, economics, commerce and social science background, so that they can form cross-disciplinary learning teams.

#### **TR4202 FROM SCIENCE TO BUSINESS – CONCEPTS IN BIOTECHNOLOGY**

Modular Credits: 6

Workload: 6-0-0-10-12

The objective of this course is to provide future entrepreneurs with knowledge on creating a business from an idea within the area of biotechnology, and some practical understanding of how to go about doing so.

#### **TR4203 BUSINESS OPPORTUNITIES IN ICT**

Modular Credits: 6

Workload: 0-4-0-12-12

This course gives an understanding of business opportunities for companies within the Information Communication Technology (ICT) sphere. It critically examines different aspects of ICT to understand different preconditions and business opportunities in the ICT-sphere. It is not aimed at developing business-plans for ICT-based enterprises.

#### **TR5105 TECHNOPRENEURSHIP**

Modular Credits: 4

Workload: 3-0-0-3-4

Description: The course provides a comprehensive overview of the major elements of high technology entrepreneurial activity, including evaluation and planning of a new business, intellectual property protection, financing, team building, product development, marketing and operational management issues, alternative models for revenue and growth, and exit strategies. The course is targeted primarily at graduate students with technical backgrounds, particularly those from engineering, science and computing who are interested in commercializing their inventions or technical know-how by starting up their own ventures.