

# Economics Courses

## **HE1001 Microeconomic Principles (3 AUs)**

This course gives students a basic grasp of economic theory as well as the ability to apply economic principles to real-world problems. The course addresses the decision-making of small economic units - consumers, firms and markets. Topics covered include cost-benefit principles, opportunity cost, laws and elasticity of demand and supply, utility maximization, the concept of the margin, indifference curves, profit maximization, market equilibrium and efficiency, market structure, market failure, public choice, externalities and property rights, the economics of public policy and of public goods.

## **HE1002 Macroeconomic Principles (3 AUs)**

This course exposes students to a basic understanding of the workings of the economy as a whole. The topics covered include measures of the GNP; inflation and unemployment; economic growth; the general product market; the 'Keynesian cross' model; the general money market, the creation of money; the role of central bank and of the financial institutions; the basic IS-LM model; aggregate demand and aggregate supply; open economy macroeconomics that includes capital flows and the balance of trade.

## **HE1005 Introduction to Probability and Statistical Inference (3 AUs)**

This course provides a statistical foundation for students to pursue further courses in econometrics and statistics. A standard calculus course would provide adequate mathematical background. The course emphasizes fundamental concepts and presents them in a logical order. Topics covered include probability; distributions and densities; mathematical expectations; functions of random variables; sampling distributions; estimation and hypotheses testing for means, variances and proportions

## **HE2001 Intermediate Microeconomics (3 AUs)**

Pre-requisite: HE1001/AB0901/HE9091

This is an intermediate course on microeconomic theory for economic majors. It covers some important contents in microeconomic theory and basic economic modeling. Economic concepts are analysed in a rigorous manner, thus laying the foundation for economic majors to pursue advanced microeconomic theory. Students who did not take HE1003 Basic Mathematics for Economists should have at least GCE A-level C mathematics or equivalent.

## **HE2002 Intermediate Macroeconomics (3 AUs)**

Pre-requisite: HE1002 /AB0901/HE9091

The aim of this course is to provide a basic understanding of the theoretical foundations of macroeconomics at an intermediate level. The course covers (a) the major macroeconomic markets: goods, money, and labor markets, and their constituent functions including the consumption function, saving function, investment function, money-demand function, the determinants of money supply, etc; (b) macroeconomic models: IS/LM/AD/AS in closed and open economics, and the Phillips curve; (c) macroeconomic stabilization and macroeconomic policies; and (d) introduction to growth theory.

### **HE2005 Principles of Econometrics (3 AUs)**

Pre-requisite: HE1005 or equivalent

This course offers students in economics and other social sciences a firm foundation in the theory and methods of econometrics. The course teaches students the main tools of estimation and inference. Applications of econometric techniques will be illustrated by empirical examples based on economic analysis. Students will be given hands-on experience through computer lab sessions.

The course begins with a thorough analysis of the simple linear regression model. It covers the estimation and hypothesis testing of regression coefficients, goodness-of-fit and prediction. The model is then extended to the multiple regression framework. Further topics such as diagnostic checking, functional forms, restricted estimation, dummy variables and structural change are discussed. In addition, the course provides an introduction to nonlinear models, models for panel data, and the matrix approach to the GLM.

### **HE3021 Intermediate Econometrics (3 AUs)**

Pre-requisite: HE2005/at least an A grade in HE2004\*

This course builds on the earlier Principles of Econometrics by considering further inferential issues related to the multiple regression model. In addition, dynamic economic models are discussed and are shown to represent many economic relationships. Topics covered include heteroskedasticity, autocorrelation, multicollinearity, omission of relevant variables, inclusion of irrelevant variables; selecting the set of regressors, autoregressive and distributed lag models.

### **HE4010 Singapore Economy in a Globalized World (4 AUs)**

Pre-requisites: HE2001 and HE2002

This is a capstone course designed for final year economics students. This course is a study of Singapore economic policies - their rationale, their design and what they have achieved. The topics will include exchange rate, privatization and competition, manpower and labour market, industrial economics, and monetary and fiscal policies. The objective is to provide final year economics undergraduates with greater insights into the policies that have shaped Singapore's economic growth and to be engaged in a discussion of these policies. It will be unique in drawing upon the expertise of adjunct staff who have been, and/or are involved in making policy and of staff members who have worked extensively in the area, and on senior government policy and decision-makers.