Ch.E Modules
The Chartered Economists Program (Ch.E.) offers an ambitious curriculum that puts students in the middle of Governmental Programs; Financial Institution, Petroleum Organization, Management positions of corporate bodies and non-governmental organizations.

**Objective**

The Ch.E. provides students with opportunities to develop the analytical, practical and interpersonal skills crucial to sound managerial decision-making in an increasingly complex economics and financial environment.

The Ch.E. is an advanced professional program designed to prepare student for a challenging career.

Our commitment is to prepare Ch.E. students for high-level careers in an increasingly global economics and financial environment. This program is offered to qualified students who seek to serve in a leadership role in economics. Emphasis is placed on the integration of organizational activities and how the various departments and functions need to work in a concerted effort to optimize organizational output. The courses in this program concentrate on the presentation of techniques that provide skills in analysis, decision-making and effectiveness assessment.

**Fundamental Level**

The fundamental level is a non-technical course in Economics and Accounting as well as exposes students to Quantitative Economics. Study must focus on understanding basic Economics principles and mathematical exposition. Emphasis should not be placed on mathematical calculations but understanding of the application of mathematical exposition to economics. However, little exposure to economics (Macroeconomics and Microeconomics) is assumed. Therefore, keep Mathematics to the minimum level.

Examination Composition: All papers in the fundamental level contain 30 multiple choice questions, 2 marks for each question and two (2) essay questions, 20 marks each to be answered within 2 hours.
Associate Part I, II & III

The pre-requisite is first degree or its equivalent. However, previous exposure to Microeconomics and Macroeconomics is assumed. Econometrics Mathematics must be well exposed to candidates.

Part II & III are intermediate, highly technical courses in Economics.

Emphasis must be laid on analysis of contemporary Economic issues with economic tools learnt. This is to enhance student's knowledge and skills in Economic issues.

Students are advice to study into detail the course modules provided by the Board of Standards. Charter will be issued to students who are able to demonstrate adequate knowledge in their field of selected specialization.

Candidate must cover the detailed course module provided by the board of standards.

Examination Description (Part I, II & III)

The current Part I & II format requires answers to five essay questions (designed to take 2hrs 30mins). The paper is 2hrs 30mins, given 5mins of reading time.

The Part III examination format also requires answers to five essay questions within 2hrs 30mins, given 5mins of reading time.

Most questions (All Parts) tend to require diagrammatical analysis to assess a policy proposal or illustrate a principle, rather than rigorous mathematics to solve formal models. They tend to be structured in the form of mini essays but require focus on a specific issue or example.
Ch.E. SYLLABUS STRUCTURE

Fundamental Level
ACCE G1 Fundamental of Economics
ACCE G2 Quantitative Economics
ACCE G3 Fundamentals of Accounting

PROFESSIONAL EXAMINATIONS (PART I, II & III)

Associate Part I
ACCE G4 Economics of Banking
ACCE G5 Investment I
ACCE G6 Risk Management I
ACCE G7 Statistics
ACCE G8 Microeconomics I

Associate Part II (ACCE II)
ACCE G9 Macroeconomics I
ACCE G10 Company Law
ACCE G11 Econometrics I
ACCE G12 International Economics

Specialization ACCE Part II
ACCE G13 Industrial Economics I
ACCE G14 Managerial Economics I
ACCE G15 Energy Economics I
ACCE G16 Health Economics I
ACCE G17 Economic Policy Analysis I
ACCE G18 Financial Economics I
ACCE G30 Petroleum Economics I

Associate Part III (ACCE III)
ACCE G19 Econometrics II
ACCE G20 Investment II
ACCE G21 Risk Management II
ACCE G22 Microeconomics II
ACCE G23 Macroeconomics II
### Specialization ACCE III

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<td>II</td>
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ACCE G1 FUNDAMENTALS OF ECONOMICS

The Art and Science of Economic Analysis
Demand, Supply, and Markets
Elasticity of Demand and Supply
Production and Cost in the Firm
Perfect Competition
Monopoly
Monopolistic Competition and Oligopoly
Resource Markets
Labor Markets and Labor Unions
Capital, Interest, Entrepreneurs and Corporate Finance
Transaction Costs, Imperfect Information, and Behavioural Economics
Economic Tools and Economic Systems
Economic Decision Makers
Consumer Choice and Demand
Economic Regulation and Antitrust Policy
Public Goods and Public Choice
Externalities and Environment
Income Distribution and Poverty

ACCE G2 QUANTITATIVE ECONOMICS

The Nature of Mathematical Economics
Economic Models
Equilibrium Analysis in Economics
Linear Models and Matrix Algebra
Comparative Statics and the Concept of Derivative
Rules of Differentiation and Their Use in Comparative Statics
Comparative-Static Analysis of General-Function Models
Optimization: A Special Variety of Equilibrium Analysis
Exponential and Logarithm Functions
The Case of More Than One Choice Variable
ACCE G3 FUNDAMENTALS OF ACCOUNTING

The Accounting World
Accounting Rules and Regulations
Recording Data
Sole Trader Accounts
Company Accounts
Other Entity Accounts
Cash Flow Statements
The Annual Report
The Annual Accounts
Interpretation of Accounts
Contemporary Issues
Foundations
Direct Cost
Indirect Costs
Budgeting
Standard Costing
Contribution Analysis
Decision Making
Capital Investment
Emerging Issues

ACCE G4 ECONOMICS OF BANKING

Why Study Money, Banking, and Financial Markets?
An Overview of the Financial System
What is Money
Understanding Interest Rates
The Behavior of Interest Rates
The Risk and Term Structure of Interest Rates
The Stock Market, the Theory of Rational Expectations, and the Efficient Market Hypothesis
An Economic Analysis of Financial Structure
Financial Crisis
Banking and the Management of Financial Institutions
Economic Analysis of Financial Regulation
Banking Industry: Structure and Competition
Central Banks and the Federal Reserve System
The Money Supply Process
ACCE G5 INVESTMENT I

The Creation of Financial Assets
Securities Markets
The Time Value of Money
The Tax Environment
Risk and Portfolio Management
Investment Companies: Mutual Funds
Closed-end Investment Companies
The Valuation of Common Stocks
Investment Returns and Aggregate Measures of Stock Markets
Dividends: Past, Present, and Future
The Macroeconomic Environment for Investment Decisions

ACCE G6 RISK MANAGEMENT I

The Problem of Risk
Introduction to Risk Management
The Insurance Device
Risk Management Applications
The Private Insurance Industry
Regulation of the Insurance Industry
Functions of Insurers
Financial Aspects of Insurer Operations
The Legal Framework
Managing Personal Risk
Social Insurance Programs
Introduction to Life Insurance
The Actuarial Basis of Life Insurance
The Life Insurance Contract - General Provisions
The Life Insurance Contract - Other Provisions
Special Life Insurance
Buying Life Insurance
ACCE G7 STATISTICS

Introduction
Organizing and Graphing Data
Numerical Descriptive Measures
Probability
Discrete Random Variables and Their Probability Distributions
Continuous Random Variables and the Normal Distribution
Sampling Distributions
Estimation of the Mean and Proportion
Hypothesis Tests About the Mean and Proportion
Estimation and Hypothesis Testing: Two Populations

ACCE G8 MICROECONOMICS I

Markets and Prices
Supply and Demand Analysis
Producer, Consumers and Competitive Markets
Consumer behavior
Individual and Market Demand
Uncertainty and Consumer Behaviour
Production, Cost of Production
Profit Maximizing and Competitive Supply
The Analysis of Competitive Markets
Externalities and Public Goods
Private Solutions to Externalities
Government Solutions to Externalities
Public Goods
ACCE G9 MACROECONOMICS I

Macroeconomics Measurement Issue
Gross Domestic Product, Economic Growth and Business Cycles
Macroeconomic Model
Consumer and Firm Behaviour
A Closed Economy One-Period Macroeconomic Model
Competitive Equilibrium
Optimality
Unemployment – Labor Market Facts
Economic Growth
Growth Theories – Economic Growth Facts
Income Disparity among Countries and Endogenous Growth
Savings, Investment and Government Deficits
Consumption – Savings, Decision and Credit Markets
Consumption and the Stock Market
Credit Frictions, Financial Crises, and Social Security
Intertemporal Model with Investment

ACCE G10 COMPANY LAW

Introduction
Formation and Promotion
Corporate Personality and the Registered Company

The Constitution of the Registered Company
Corporate Decision Making
Corporate Transactions
Capital
Shares
Inside Dealing
Directors
Accounts and Auditors
Company Charges
Shareholder Remedies
Winding up
European Union Action in Company Law
ACCE G11 ECONOMETRICS I

An Introduction to Econometrics Probability Primer
The Simple Linear Regression Model
Interval Estimation and Hypothesis Testing
Prediction, Goodness-of-Fit, and Modeling Issues
The Multiple Regression Model
Further Inference in the Multiple Regression Model
Using Indicator Variables
Heteroskedasticity
Regression with Time-Series Data: Stationary Variables

ACCE G12 INTERNATIONAL ECONOMICS

The International Economy and Globalization
Foundations of Modern Trade Theory: Comparative Advantage
Sources of Comparative Advantage
Tariffs
Nontariff Trade Barriers
Trade Regulations and Industrial Policies
Trade Policies for the Developing Nations
Regional Trading Arrangements
International Factor Movements and Multinational Enterprises
The Balance-of-Payments
Foreign Exchange
Exchange Rate Determination
Mechanisms of International Adjustment
Exchange Rate Adjustments and the Balance-of-Payments
Exchange Rate Systems and Currency Crises
Macroeconomic Policy in an Open Economy
International Banking: Reserves, Debt, and Risk
ACCE G13 INDUSTRIAL ECONOMICS I

Industrial Organization: An Introduction
Microeconomic Foundations
Theories of the Firm
Oligopoly: Non-Collusive Models
Oligopoly: Collusive Models
Concentration: Measurement and Trends
Determinants of Seller Concentration
Barriers to Entry
Market Structure, Firm Strategy and Performance

ACCE G14 MANAGERIAL ECONOMICS I

Managers and Economics
Demand, Supply, and Equilibrium Prices
Demand Elasticities
Techniques for Understanding Consumer Demand and Behavior
Production and Cost Analysis in the Short Run
Production and Cost Analysis in the Long Run
Market Structure: Perfect Competition
Market Structure: Monopoly and Monopolistic Competition

ACCE G15 ENERGY ECONOMICS I

Introduction to Energy Economics
Energy Data and Energy Balance
Understanding and Analysing Energy Demand
Energy Demand Analysis at a Disaggregated Level
Energy Demand Forecasting
Energy Demand Management
Economic Analysis of Energy Investments
Economics of Fossil Fuel Supply
Economics of Non-Renewable Resource Supply
Economics of Electricity Supply
The Economics of Renewable Energy Supply
Energy Markets and Principles of Energy Pricing
Energy Pricing and Taxation
International Oil Market
ACCE G16 HEALTH ECONOMICS I

Introduction
Microeconomic Tools for Health Economics
Statistical Tools for Health Economics
Economic Efficiency and Cost-Benefit Analysis
Production of Health
The Production, Cost, and Technology of Health Care
Demand for Health Capital
Demand and Supply of Health Insurance
Consumer Choice and Demand
Asymmetric Information and Agency
The Organization of Health Insurance Markets

ACCE G17 ECONOMIC POLICY ANALYSIS I

Concepts
Economic Policy in a Complex World
Fiscal Policy
Monetary Policy

ACCE G18 FINANCIAL ECONOMICS I

Finance and the Finance System
Financial Economics
Financial Markets and Institutions
Managing Financial Health and Performance
Time and Resource Allocations
Allocating Resources over Time
Household Saving and Investment Decisions
The Analysis of Investment Projects
Valuation Models
Principles of Markets Valuation
Valuation of Known Cash Flows: Bonds
Valuation of Common Stocks
What Do Interest Rates Mean and what is Their Role in Valuation?
Why Do Interest Rates Change?
How Do Risk and Term Structure Affect Interest Rates?
Are Financial Markets Efficient?
Why Do Financial Institutions Exist?
Why Do Financial Crises Occur and Why Are They So Damaging to the economy
Central Banks and the Federal Reserve System
Conduct of Monetary Policy: Tools, Goals, Strategy, and Tactics
The Money Markets
The Bond Market
The Stock Market

ACCE G30 PETROLEUM ECONOMICS I

World Oil and Gas Supply and Demand
Structure of the Oil and Gas Industry
Characteristics of Crude Oils and Properties of Petroleum Products
Time Value of Money (TVM) in Capital Expenditures
Depreciation and Depletion in Oil Projects
Financial Measures and Profitability Analysis
Analysis of Alternative Selections and Replacements
Risk, Uncertainty, and Decision Analysis
Break-Even and Sensitivity Analysis
Optimization Techniques
Exploration and Drilling
Reserves and Reserve Estimate
Production Operations
Gas-Oil Separation
Crude-Oil Treatment: Dehydration, Desalting, and Stabilization
Gas Treatment and Conditioning
Crude Oil Refining: Physical Separation
Crude Oil Refining: Chemical Conversion
Natural Gas Processing
Oil and Gas Transportation
Territorial Delimitations and Hydrocarbons Resources
Licenses, Concessions, Production Sharing Agreements and Services Contracts
Upstreaming Joint Ventures - Bidding and Operating Agreements
Unitisation and Unitisation Agreements
Financing Upstream Developments
Transboundary Pipeline Development and Risk Mitigation
Liquified Natural Gas
**ACCE G19 ECONOMETRICS II**

Random Regressors and Moment-Based Estimation  
Simultaneous Equations Models  
Regression with Time-Series Data: Nonstationary  
Vector Error Correction and Vector Autoregressive  
Time-Varying Volatility and ARCH Models  
Panel Data Models  
Qualitative and Limited Dependent Variable Models

**ACCE G20 INVESTMENT II**

Analysis of Financial Statements  
Behavioural Finance and Technical Analysis  
The Bond Market  
The Valuation of Fixed-Income Securities  
Government Securities  
Convertible Bonds and Convertible Preferred Stock  
An introduction to Options  
Option Valuation and Strategies  
Commodity and Financial Futures  
Investing in Foreign Securities  
Investing in Nonfinancial Assets: Collectibles, Natural Resources, and Real Estate  
Portfolio Planning and Management in an Efficient Market Context

**ACCE G21 RISK MANAGEMENT II**

Annuities and Pension Benefits  
Managing the Retirement Risk  
Health Insurance: Disability Income Insurance  
Health Insurance: Coverage for Medical Expenses  
Health Insurance for the Elderly  
Employee Benefits and Other Business Uses of Life and Health Insurance  
The Homeowners Policy - General Provisions  
The Homeowners Policy Forms
Other Personal Forms of Property Insurance
Negligence and Legal Liability
General Liability Insurance for the Individuals
The Automobile and its Legal Environment
The Personal Auto Policy
Commercial Property Insurance
Commercial Liability Insurance
Surety Bonds and Trade Credit Insurance
Insurance in the Future

ACCE G22 MICROECONOMICS II

Market Structure and Competitive Strategy
Market Power: Monopoly and Monopsony
Pricing with Market Power
Monopolistic Competition and Oligopoly
Game Theory and Competitive Strategy
Markets for Factor Inputs
Investment, Time and Capital Markets
Market Failure, and the Role of Government
General Equilibrium and Economic Efficiency
Markets with Asymmetric Information
Externalities and Public Goods
Behavioural Economics
International Economic Policy Issues
Comparative Advantage, Exchange rates and Globalization
International Trade Policy
Social Economics
The Economics of Charity and Fairness
The Economics of Trust and Revenge

ACCE G23 MACROECONOMICS II

Money and Business Cycles
Monetary Policy, Money and Banking, Prices
Business Cycle Models with Flexible Prices and Wages
The New Keynesian Economics: Sticky Prices
Inflation and the Phillips Curve
International Macroeconomics
Money in the Open Economy
International Trade in Goods and Assets

Money, Banking and Inflation
Deeper Look at Money, Inflation and Banking
Commodity Money and Commodity – Backed Paper Money
Long-run Inflation in the Monetary Intertemporal Model

Global Bank Failures and Banking Panic
International Adjustments
The Economics of Depression, Hyperinflation and Deficits
International Adjustments and Interdependence

Fiscal Policy
The Goals of Macroeconomic Policy
The Goals of Macroeconomic Policy Makers
Federal Budget
The Economy and the Federal Budget: Concept of Automatic Fiscal Stabilizers

**ACCE G24 INDUSTRIAL ECONOMICS II**

Pricing
Auctions
Product Differentiation
Advertising
Research and Development
Vertical Integration and Restraints
Diversification
Competition Policy
Regulation
ACCE G25 MANAGERIAL ECONOMICS II

Market Structure: Oligopoly  
Pricing Strategies for the Firm  
Measuring Macroeconomic Activity  
Spending by Individuals, Firms, and Governments on Real Goods and Services  
The Role of Money in the Macro Economy  
The Aggregate Model of the Macro Economy  
International and Balance of Payments Issues in the Macro Economy  
Combining Micro and Macro Analysis for Managerial Decision Making

ACCE G26 ENERGY ECONOMICS II

Markets for Natural Gas  
Developments in the Coal Market  
Integrated Analysis of Energy Systems  
Overview of Global Energy Challenges  
Impact of High Energy Prices  
Energy Security Issues  
Investment Issues in the Energy Sector  
Energy Access  
The Economics of Environment Protection  
Pollution Control from Stationary Sources  
Pollution Control from Mobile Sources  
The Economics of Climate Change  
The Clean Development Mechanism

ACCE G27 HEALTH ECONOMICS II

Managed Care  
Nonprofit Firms  
Hospitals and Long-Term Care  
The Physician's Practice  
Health Care Labor Markets and Professional Training  
The Pharmaceutical Industry
ACCE G28 ECONOMIC POLICY ANALYSIS II

International Financial Integration and
Foreign-Exchange Policy
Growth Policies
Tax Policy
Economic Policy and the 2007 - 09 Crisis

ACCE G29 FINANCIAL ECONOMICS II

Principles of Risk Management
Hedging, Insuring, and Diversifying
Portfolio Opportunities and Choice
Capital Market Equilibrium
Forward and Future Markets
Markets for Options and Contingent Claims
Financial Structure of the Firm
Real Options
The Mortgage Markets
The Foreign Exchange Market
The International Financial System
The Banking and the Management of Financial Institutions
Financial Regulation
Banking Industry: Structure and Competition
The Mutual Fund Industry
Insurance Companies and Pension Funds
Investment Banks, Security Brokers and Dealers, and Venture Capital Firms
Risk Management in Financial Institutions
Hedging with Financial Derivatives
ACCE G31 PETROLEUM ECONOMICS II

Gas Sale and Purchase Agreements
Crude Oil Sale and Purchase Agreements
Shipping Arrangements
Gas Allocation Agreements
Gas Balancing Agreements
Buying and Selling Upstream Assets
Gas Processing
Decommissioning of Upstream Oil and Gas Facilities
Theoretical Perspectives on Resource Tax Design
Principles of Resource Taxation for Low-Income Countries
Petroleum Fiscal Regimes: Evolution and Challenges
International Mineral Taxation: Experience and Issues
Natural Gas: Experience and Issues
Evaluating Fiscal Regimes for Resource Projects: An Example from Oil Development
Resource Rent Taxes: A Re-appraisal
State Participation in the Natural Resource Sectors: Evolution, Issues and Outlook
How to Best Auction Natural Resources
Resource Tax Administration: The Implications of Alternative Policy Choices
Resource Tax Administration: Functions, Procedures and Institutions
International Tax Issues for the Resource Sector
Contractual Assurances of Fiscal Stability
Time Consistency in Petroleum Taxation: Lessons from Norway

GAFM Certification Worldwide