# MA Economics (Collaborative Programme) - SH540

## 1. Background

This is a high-calibre, 2-year part-time Masters programme in Economics offered by the University of Mauritius in close collaboration with the African Economic Research Consortium (AERC – website: <a href="www.aercafrica.org">www.aercafrica.org</a>), a public, non-profit-making organization devoted to advanced economic research and training, based in Nairobi, Kenya. Students will spend the first year at the University of Mauritius, where they will take 3 core modules and sit for the examinations (around May 2011). On successful completion of the core modules, students will travel to Nairobi around late June 2011 to take 3 elective modules over one semester (3 months) at the Joint Facility for Electives (JFE). Finally, they will return to the University of Mauritius to prepare their MA thesis during the 4th semester.

All fees relating to the programme are payable to the University of Mauritius. However, the AERC, as per past practice, will meet tuition costs for all students at the JFE, Nairobi. In addition, the AERC will take care of the travel and accommodation costs for students not sponsored by their employer. The JFE is a modern campus, complete with dorms, computer labs and sports facilities, including a swimming pool, and is well secured. All meals are provided free of charge in buffet style, catering for a variety of dietary preferences. The AERC provides health coverage to all students and offers a modest stipend for incidental expenses.

This programme offers solid training in economics and is targeted to those who intend to work as an economist, teacher/lecturer or consultant in the private or public sector as well as those who wish to pursue a PhD in economics. It provides an excellent opportunity for Mauritians to mix with students of different cultures and interact with African and international professors.

# 2. Objectives

The objectives of the MA Economics programme are:

- To provide advanced training in economic theory and methods to prepare individuals for key
  positions of responsibility in policy analysis and economic management in Government as well
  as in the private sector and institutions of higher learning.
- To prepare a select group of individuals for doctoral-level work through rigorous training in theory, methods and applications.
- To develop the ability to identify problems and the capacity for decision-making, leading to practical solutions.
- To enhance the individual's capacity to meet emerging challenges within an organisation with a
  view to increasing domestic and international competitiveness in a rapidly changing global
  environment.

# 3. General Entry Requirements

Successful completion of an undergraduate degree with

- (i) at least a Second Class or 50%, whichever is applicable or
- (ii) a GPA not less than 2.5 out of 4 or equivalent, from a recognised higher education institution.

Or alternative qualifications acceptable to the University of Mauritius

# 4. Programme Requirements

At least a Second Class Honours Degree in Economics, or any other social science discipline of which Economics is a major component, or alternative qualifications acceptable to the Department of Economics and Statistics, from a recognised University.

# 5. General and Programme Requirements - Special Cases

The following may be deemed to have satisfied the general and programme requirements for admission:

- (i) Applicants who do not satisfy any of the requirements as per Regulations 2 and 3 above but who submit satisfactory evidence of having passed examinations which are deemed by the Senate to be equivalent to any of those listed.
- (ii) Applicants who do not satisfy any of the requirements as per Regulations 2 and 3 above but who in the opinion of Senate submit satisfactory evidence of the capacity and attainments requisite to enable them to pursue the programme proposed.
- (iii) Applicants who hold a full practising professional qualification obtained by examination.

# 6. Programme Duration

Minimum: 2 years; Maximum: 4 years

# 7. Credits per Semester

As per University Regulation.

# 8. Minimum Credits Required For Degree Award: 45 Credits

	<b>Core Modules</b>	Dissertation	Electives	Total
Master Degree	18 credits	9 credits	18 credits	45 credits

## 9. Assessment

## **Continuous and Written Assessment of Modules**

All core modules will be taught over the course of two semesters, and examined at the University of Mauritius at the end of the academic year. Upon successful completion of the core modules, students will, in the month of July, travel to Nairobi to take three elective modules over one semester in a centralized facility, called the Joint Facility for Electives (JFE). The continuous assessment and written exams for the -three electives will take place at the JFE.

Students are expected to return to the University of Mauritius to commence work on their thesis or research paper, the successful completion of which may take between 6 to 12 months.

# For the core modules taken at the University of Mauritius:

- (i) Continuous assessment can be based on seminars and/or assignments and should include at least 1 class test.
- (ii) For a student to pass a module, a minimum of 30% should be attained in both of Continuous Assessment and Written Examination separately, with an overall total of a minimum of 40% in that module.

- (iii) No resit examinations will be organised. Instead, students will be allowed to carry forward a maximum of three modules at any point in time and will be allowed to sit for the examinations with the next cohort of students.
- (iv) All modules carry their own credit value.
- (v) All modules will be run after 2.00 p.m.

## **Electives Modules taken in Nairobi**

For a student to pass a module, a minimum of 50% should be attained.

## **Submission Deadlines for Dissertation**

- 1st draft: Last Working day of July
- Final copy: Last week day of August in the final year by 4.00 pm at latest.

# 10. Repeat and Termination of Registration

If the CPA of a student is < 40% for an academic year, s/he will have to repeat the entire academic year, and retake modules as and when offered. However, s/he will not be required, if s/he wishes, to retake modules for which **Grade C** or above has been obtained.

Students will be allowed to repeat **only once** over the entire duration of the Programme of Studies.

Registration of a student will be terminated if

- (i) the CPA < 40% at the end of an academic year and the student has already repeated one year of study; or
- (ii) the maximum duration allowed for completion of the Programme of Studies has been exceeded.

# 11. List of Modules

CODE	MODULE NAME	Hrs/Wk L + P	Credit
CORE MODUL	ES		
ECON 5013	Advanced Microeconomics	3 + 0	6
ECON 5022	Advanced Macroeconomics	3 + 0	6
ECON 5023	Quantitative Methods	3 + 0	6
<b>ELECTIVES</b>			
ERC 6001	Agricultural Economics		6
AERC 6002	Corporate Finance and Investment		6
AERC 6003	Econometrics Theory and Practice		6
AERC 6004	Environmental Economics		6
AERC 6005	Game Theory and Information		6
	Economics		
AERC 6006	Health Economics		6
AERC 6007	Industrial Economics		6
AERC 6008	International Economics		6
AERC 6009	Labour Economics		6
AERC 6010	Managerial Economics		6
AERC 6011	Monetary Theory and Practice		6
AERC 6012	Public Sector Economics		6
AERC 6013	Research Methods and Computer Applications		6
ECON 6000	Dissertation	-	9

Note: Contact hours for the electives vary from one elective to another. On average, they range from 7 to 8 hours a week over 14 weeks.

# 12. Programme Plan – MA Economics (Collaborative)

# YEAR 1

CODE	MODULE NAME	Hrs/Wk L + P	Credit
CORE			
MODULES			
ECON 5013	Advanced Microeconomics	3 + 0	6
ECON 5022	Advanced Macroeconomics	3 + 0	6
ECON 5023	Quantitative Methods	3 + 0	6
	YEAR 2		
CORE MODULES	MODULE NAME	Hrs/Wk L + P	Credit
ELECTIVES	Choose 3 from the following 13 electives (Note: These electives are offered at the JFE in Nairobi):		
AERC 6001	Agricultural Economics		6
AERC 6002	Corporate Finance and Investment		6
AERC 6003	Econometrics Theory and Practice		6
AERC 6004	Environmental Economics		6
AERC 6005	Game Theory and Information		6
	Economics		
AERC 6006	Health Economics		6
AERC 6007	Industrial Economics		6
AERC 6008	International Economics		6
AERC 6009	Labour Economics		6
AERC 6010	Managerial Economics		6
AERC 6011	Monetary Theory and Practice		6
AERC 6012	Public Sector Economics		6
AERC 6013	Research Methods and Computer		6
	Applications		
ECON 6000	Dissertation	-	9

## 13. Outline Syllabus

## **ECON 5013 - ADVANCED MICROECONOMICS**

The Theory of Consumer Behaviour and Applications; Theory of the Firm; Choice under Uncertainty and Applications; Market Structure: Competitive Markets and Monopoly; Game Theory and Oligopoly Behaviour; Alternative Theories of the Firm; Asymmetric Information Models; General Equilibrium and Welfare Economics; Market Failure: Public Goods and Externalities; Property Rights and Rent Seeking.

## ECON 5022 - ADVANCED MACROECONOMICS

Introduction; Consumption and Saving; Investment; The Labour Market, Inflation and Unemployment; Monetary and Fiscal Policies; Business Cycle Models; Stabilization Policy and Applications; Political Economy of Macroeconomic Policies; Economic Growth: Classical Models and Endogenous Growth Theory; The Open Economy and Exchange Rate Models.

# **ECON 5023 - QUANTITATIVE METHODS**

Mathematics: Matrix Algebra; Optimisation Theory and Techniques; Differential Calculus and Applications; Dynamic Analysis. Econometrics: Modelling Univariate Data; Classical Regression Analysis; Hypothesis Testing; Model Selection; Time Series Methods; Panel Data Models.

## **AERC 6001 - AGRICULTURAL ECONOMICS**

Part I: Theoretical and Empirical Issues

Introduction: The Nature of Agriculture and Farming Systems; Agriculture in Economic Development. Agricultural Household Models and Farmer Behaviour; Supply Response; Technological Change in Agriculture.

Part II: Agricultural Policy Analysis

Agriculture and Policy; Approaches to Policy Analysis; Policy Reforms Affecting Agriculture; Food Policy Analysis; Trade in Agricultural Commodities, Market Access and Regional Integration; Science and Technology Policy in Agriculture; Role of Infrastructure and Rural Institutions.

## **AERC 6002 - CORPORATE FINANCE AND INVESTMENT**

Part 1: Introduction; Institutional Structure; Issuing and Trading of Financial Assets; Valuation Methods and Techniques; Portfolio Theory and Management; Short-Term Financing; Development Finance.

Part II: Capital Budgeting; Market Efficiency; Asset Pricing Theories; Capital Structure and Dividend Policy; Securitization; Security Analysis; Other Issues in Corporate Finance: Corporate Governance; M&A; IPOs; Options and Derivatives, Pension Funds.

## **AERC 6003 - ECONOMETRICS THEORY AND PRACTICE**

Part I: Topics in Macroeconometrics

Introduction; Review of the Classical Linear Regression Model; Estimation Methods; Simultaneous Equation Models; Distributed Lag Models; Linear Stationary and Non-Stationary Time Series Models; ARCH/GARCH Models.

Part II: Topics in Microeconometrics

Panel Data Models; Discrete Choice Models; Censored Regression Models; Duration Models.

## **AERC 6004 - ENVIRONMENTAL ECONOMICS**

Part I: Basic Issues in Environmental Economics: Scope and Nature of Environmental Economics; Economic Development and the Environment. Economics of Natural Resource Extraction and Management: Taxonomy of Natural Resources; Dynamic Optimization; Renewable and Non-renewable Resources. Natural Resource Accounting: Theory and Practice.

Part II: Basic Issues in Environmental Valuation and Policy: Public Goods and Externalities. Environmental Valuation Analysis: Value and Welfare; Environmental Valuation and Techniques. Environmental Policy Instruments: Market-based Instruments; Regulations and Standards; Property Rights Reform; International Environmental Management; Optimal Pollution Control and Waste Management.

## **AERC 6005 - GAME THEORY AND INFORMATION ECONOMICS**

Part I: Introduction and Elements. Static Games with Complete Information: Nash Equilibrium, Mixed Strategies, Advanced Topics. Dynamic Games with Complete Information: Sub game Perfect Equilibrium; Bargaining, Repeated Games.

Part II: Static Games with Incomplete Information: Bayesian Nash Equilibrium and Applications. Dynamic Games with Complete Information: Perfect Bayesian Equilibrium; Sequential Equilibrium; Signalling Games; Reputation. Information Economics: Asymmetric Information; Principal-Agent Models; Adverse Selection and Moral Hazard, Applications. Topics in Game Theory: Auctions, Evolutionary Game Theory.

## **AERC 6006 - HEALTH ECONOMICS**

Part I: Introduction: Economics of Health and Health Care; Health Care as an Economic Commodity; Need vs. Demand. Demand for and Supply of Health; Markets and Market Failure in Health and Health Care; Health Insurance, Moral Hazard and Adverse Selection.

Part II: Health and Development; Health Systems and Financing; Health Policy and Reform; Economic Evaluation of Health Systems and Basic Epidemiology.

## **AERC 6007 - INDUSTRIAL ECONOMICS**

Part I: Overview: Industry and Economic Development. Analysis of Industrial Structure: The Structure-Conduct-Performance Paradigm; Elements of Structure; Dimensions of Performance; Industrial Structure and Interactions. Firm Structure and Conduct: Existence of firms; Internal Structure; Firm Size and Growth; Firms in an International Context.

Part II: Industrial Policy and Trade: Industrialization Options and Strategies; Macro and Sectoral Policies. Competition Policy: Imperfect Competition and Market Power; Abusive Practices; Developments towards Competition Policy. African Industry in the Context of International Experiences.

# **AERC 6008 - INTERNATIONAL ECONOMICS**

Part I: Trade Theory and Policy

Perfect Competition Models of Trade and Empirical Evidence; Imperfect Competition, Increasing Returns to Scale and New Trade Theories; International Trade Policy; Strategic Trade Policy; Economic Integration; Political Economy of Trade Policy; International Trade Institutions; Trade Policy and Economic Development; Trade Strategy and Industrialization; Trade Reform.

Part II: International Finance

Open Economy Accounting; Foreign Exchange Markets and International Parity Conditions; Models of BOP Adjustment; Theories and Models of ER Determination; ER Volatility, Speculation and Bubbles; Fiscal and Monetary Policy Under Different ER Regimes; International Capital Movements.

## **AERC 6009 - LABOUR ECONOMICS**

Part I: Introduction to Labour Economics; Labour Supply; Labour Demand; Wage and Employment Determination.

Part II: Overview of Labour Markets in Africa; Unemployment and Underemployment; Employment Policies; Labour Migration; Income Distribution and Poverty; Human Resource Development; Economics of Labour Market Discrimination.

# **AERC 6010 - MANAGERIAL ECONOMICS**

Part I: Overview of Managerial Economics; Production and Cost Analysis; Transaction Cost Analysis, Agency Theory and Incentives; Business and Economic Forecasting.

Part II: Pricing Analysis under Different Market Structures; Product Quality, Product Design Strategies and Advertising; Long-term Investment Decisions; Economics of Business Enterprises in Africa; Management of Public Goods in Africa.

## **AERC 6011 - MONETARY ECONOMICS**

Part I: Issues in Monetary Economics; Demand for Money; Supply of Money; Money and the Price Level; The Central Bank and Monetary Policy.

Part II: Financial Institutions and Financial Intermediation; Financial Development and Economic Development; Money in the Open Economy; Money and Economic Growth; International Financial Institutions and Policy.

## **AERC 6012 - PUBLIC SECTOR ECONOMICS**

Part I: Overview of Welfare Economics; Market Failure and the Rationale for Government Intervention; Public Expenditure Theory; Cost Benefit Analysis and Investment Rules; Government Failure.

Part II: Theory of Taxation; Tax Policy and Tax Reforms; Intergovernmental Fiscal Relations; Public Debt.

## AERC 6013- RESEARCH METHODS AND COMPUTER APPLICATIONS

Part I: Research Methods, Writing Skills and Computers

Introduction to RM; Preparing the research proposal; Data types and Data management; Introduction to computers; Word processing and Presentation skills.

Part II: Computer Applications

Analysis of cross-section data and applications: Data management and processing, Limited dependent variables models, Applications: Time-series analysis and results interpretation: Data generating processes, Co integration, VAR, VECM, Variance models, Simultaneous equations models and GMM, Applications: Panel data econometrics: one-way and two-way error component regression models, Hypothesis testing, Applications. Various econometric software packages will be used.

## **ECON 6000 - DISSERTATION**

Every student has to submit a dissertation of 12,000 - 18,000 words by the end of the fourth semester. The dissertation topic should preferably be selected from within the area of specialisation pursued by the student.

04 November 2011