

PROGRAM / COURSE OBJECTIVES AND OUTCOMES

of

M. A.in Analytical and Applied Economics

Admission Batch 2021-22

Choice Based Credit System

(Passed in the BoS Meeting dated 30 January 2021)



**Department of Analytical and Applied
Economics**

**Utkal University, Vani Vihar,
Bhubaneswar, Odisha, India**

The department of Analytical and Applied Economics offers three programmes at post-graduate level. Those are (i) MA in A & A Economics, (ii) M.Phil in A & A Economics and (iii) Ph.D in A & A Economics.

Master of Arts in Analytical and Applied Economics

Eligibility: Bachelor's degree in 10+2+3 or other equivalent modes

Intake Capacity: 88

Selection criteria: Career score and performance in common entrance test.

Programme Description and Objectives:

The Masters programme in A & A Economics was initiated in 1963 as an effort to provide Economics education to students of Odisha aspiring for a career in economics and public policy. Currently, the programme operates in a Choice Based Credit system (CBCS) mode of 100 credits spread out in four semesters. The course composition includes analytical courses termed as Hard Core Economics courses such as Microeconomics, Macroeconomics, Quantitative Methods, Public Economics, Indian Economy and Basic Econometrics. These courses are designed to provide a core understanding of the subject. There are also applied courses termed as Core Electives and Allied Electives which are designed to enrich understanding on application of economics in various fields influencing economic and social life of human beings. A detailed description of these courses is given in the detailed syllabus. In order to make the course more interdisciplinary and to respect the spirit of choice based system of education, there are also courses called free electives offered to any student of the university irrespective of their discipline. These courses include International Finance, Computer Application in Economics, Environmental Impact Assessment, and Entrepreneurship and Economic Development. The courses are revised in regular intervals to incorporate new knowledge in economic sciences and their application. In order to promote research aptitude and orientation, which can help our students in their higher studies in economics, the programme also includes a five credit course that requires students to undertake a guided research work and write a dissertation reporting their findings.

Expected Outcomes of the MA Programme

The students who successfully complete the programme are expected to have

- (1) Exposure to social realities through study tours, data collection through fieldwork and regular interaction with experts in student seminars.
- (2) Exposure to computational packages like Stata and SPSS which are widely used for data analysis in industry.
- (3) Better employability through skill building in quantitative research, computational packages, add-on courses and compulsory Internship programme introduced in 2021.
- (4) Better writing skills through their engagement in dissertation writing, term papers and concurrent evaluation activities.

Course Structure for MA in A & A Economics

SEMESTER I

Paper Code	Nature of Paper	Paper Name	Credit
HCE101	Hard Core	Microeconomics I	05
HCE102		Macroeconomics I	05
HCE103		Quantitative Methods I	05
HCE104		Public Economics	05
HCE105		Indian Economy	05

SEMESTER II

Paper Code	Nature of Paper	Paper Name	Credit
HCE201	Hard Core	Microeconomics II	05
HCE202		Macroeconomics II	05
HCE203		Quantitative Methods II	05
HCE204		Economics of Growth and Development	05
CEE201	Core Elective	Core Elective I	05
Summer Internship: Minimum of one month duration (Compulsory)			02

SEMESTER III

Paper Code	Nature of Paper	Paper Name	Credit
HCE301	Hard Core	Basic Econometrics	05
CEE301	Core Elective	Core Elective II	05
AEE301	Allied Elective	Allied Elective I	05
FEE301	Free Elective	Free Elective I	05
FEE302		Free Elective II	05

SEMESTER IV

Paper Code	Nature of Paper	Paper Name	Credit
CEE401	Core Elective	Core Elective III	05
CEE402		Core Elective IV	05
AEE401	Allied Elective	Allied Elective II	05
AEE402		Allied Elective III	05
AEE403		Allied Elective IV	05

Total Credit 100+2

Available Electives and Allied: Semester-wise

Semester II

Core Electives

1. **Economics of Education**
2. Labour Economics

Semester III

Core Electives,

1. **International Economics**
2. Industrial Economics
3. Banking

Allied Electives,

1. **Agricultural Economics**
2. History of Economic Thought
3. Managerial Economics

Free Electives

1. **International Finance**
2. **Computational Economics**
3. **Health Economics**
4. Environmental Impact Assessment
5. Entrepreneurship and Economic Development

Semester IV

Core Electives

1. **Economics of Environment**
2. **Dissertation**
3. **Rural Economics**
4. Demography

Allied Electives

1. **Financial Institutions and Market**
2. **Mathematical Economics**
3. **Advanced Econometrics**
4. **Economics of Gender and Development**
5. **Financial Inclusion and Economic Development**
6. Economics of Discrimination
7. Financial Economics

Proposed Allied Department

1. Commerce
2. Management
3. PM&IR
4. Statistics
5. Sociology
6. Anthropology
7. Mathematics
8. Psychology

Semester I
Paper HCE101
Microeconomic Analysis I

Course Objectives

1. To have a theoretical understanding of consumer behavior and decision-making
2. To get acquainted with recent advances in microeconomic theory and acquire the skills to apply the theoretical knowledge in research
3. To learn about theory of demand, Utility Functions - types and properties; Consumers' choice involving risk and uncertainty; Production function – types and properties; Theories of Cost and general equilibrium theory – An overview.

Course Outcomes:

On successful completion of this course students will be able to:

1. have an understanding of the basic reasoning of Economics and understand the consumption; production and cost concepts in an analytical way;
2. apply mathematical tools and techniques to study behavior of economic agents;
3. understand the basic principles of General equilibrium theory

Paper HCE102
Macroeconomic Analysis I

Course Objectives:

1. To analyse and establish the functional relationship between economy level/aggregates.
2. To have a proper understanding of macroeconomic theoretical structure
3. To educate the students on different terms and concepts in macroeconomics like national income accounting, Circular flows, consumption function, investment function, supply and demand for money.

Course Outcomes:

On successful completion of this course students will be able to:

1. apply the subject knowledge in understanding the working of the economy as well as the macroeconomic issues and policies; and
2. understand systemic facts and theoretical developments.

Paper HCE103
Quantitative Methods I

Course Objectives

1. To train the students to use the techniques of mathematical and statistical analysis, which are commonly applied to understand and analyze economic problems
2. To emphasize the mathematical methods rather than learning mathematics itself, which are usually used for understanding economic concepts
3. To learn about the classical techniques involving functions and calculus
4. To gain knowledge about the elements of Game Theory as applicable to real life economic analysis.

Course Outcome

On completion of this course, a student should be able to

1. express relationship between economic variables mathematically, analyze, optimize and interpret them;
2. use appropriate techniques to solve problems with calculus and linear algebra.
3. understand the basics of Game theory to resolve economic issues.

Paper HCE104
Public Economics

Course Objectives:

1. To provide the students with thorough analytical understanding to analyze public goods, externalities, market failures; economics of government expenditure, taxation and public borrowing;
2. To critically analyze fiscal policies/finance and its implication in Indian Economy.

Course Outcomes

On successful completion of this course, the students will be able to

1. have conceptual clarity on the theories of public goods, public expenditure, public revenue and public borrowing; and
2. apply the principles of public economics in analyzing various government policies.

Paper HCE105 Indian Economy

Course Objectives

1. To critically understand the economic growth trajectory, economic policies, and institutional reforms of modern India
2. To understand four major economics challenges of Indian Economy, i.e. Poverty, Inequality, Unemployment and inflation
3. To have an in-depth analysis of the sectoral contributions of agriculture, industry and service sector in India
4. To examine the operation and implementation of fiscal and monetary policy in India

Course Outcomes

On successful completion of this course students will be able to:

1. have a clear picture of the economic growth trajectory, economic policies, and institutional reforms in India;
2. understand four major economics challenges of Indian Economy, i.e. Poverty, Inequality, Unemployment and inflation;
3. have an in-depth analysis of the sectoral contributions of agriculture, industry and service sector in India; and
4. understand the nitty-gritty of fiscal and monetary policy.

Semester II Paper HCE201 Microeconomic Analysis II

Course Objectives:

1. To impart theoretical knowledge on decision making under market imperfections.
2. To impart theoretical knowledge on distribution.

Course Outcomes:

After completing the course, the students are expected to have

1. deeper knowledge on decision making under different market imperfections including oligopoly;
2. deeper knowledge about the broad paradigm of neo-classical economics; and
3. deeper knowledge about distributional and welfare aspects of economic activities.

Paper HCE202 Macroeconomic Analysis II

Course Objectives:

1. To make the students understand the different terms and concepts in macroeconomics like Money market and real market, inflation in developing countries, causes of occurrence of business cycle in a market economy and ways to control them.
2. To expose the students to open economy macroeconomics and the dynamics there in.

Course Outcomes:

On successful completion of this course students will be able to

1. apply the subject knowledge in understanding the macroeconomic dynamics both in a closed and an open economy; and
2. understand the functioning of a market economy and the ways and means to keep such an economy functioning properly.

Paper HCE203 Quantitative Methods II

Course Objectives:

1. To train the students to use the techniques of probability theory and statistical analysis, which are commonly applied to understand and analyze economic problems
2. To deal with simple tools and techniques, which will help in sampling theory and designs, data collection, analysis, theory of estimation and hypothesis testing
3. To initiate the correlation analysis - simple, multiple and partial, and regression analysis - linear and non-linear.

Course Outcomes:

On completion of this course, a student should be able to

1. have fair idea about probability theory which forms the foundation of inferential statistics;
2. understand theoretical distributions and their significance;
3. understand sampling and sampling designs, theory of estimation and hypothesis testing procedure; and
4. fit a linear and some commonly used non-linear curves.

Paper HCE 204
Economics of Growth and Development

Course Objectives:

1. To learn neoclassical growth models of Solow, Meade, Robinson, Kaldor and Pasinetti
2. To discuss about Cambridge criticism over measurement of capital
3. To understand the importance of endogenous growth theories which highlight on human capital as an essential component for a country like India
4. To analyse the investment decisions through investment criterion along with its merits and demerits

Course Outcomes:

On completion of this course, a student should be able to

1. to gain knowledge about recent developments in growth and development, and in particular dynamic growth theories focusing, among other issues, on labor market distortions, pollution and the cost benefit of projects to be undertaken.

Paper CEE201
Economics of Education

Course Objectives:

1. To study the role of economics in evaluating education and education policy
2. To familiarize with educational problems in the context of economic concepts, theories and techniques
3. To develop an understanding of planning, financing and cost of education
4. To find the link between the educational system and economic development
5. To apply standard economic theories to understand how individuals make education choices
6. To explain and predict education markets and their inefficiencies

Course Outcomes:

On successful completion of the course, students will be able to

1. understanding of key concepts, issues, theories and models relating to economics of education, along with empirical evidence on and policy implications of those theories and models and a deeper understanding of recent research activity;
2. understand methods used by economists to evaluate education policies;
3. understand and Model the Education Production Function;
4. define the return to education and understand its empirical estimates; and
5. research and investigative skills such as problem framing and solving and the ability to assemble and evaluate complex evidence and arguments.

Paper INT201
Summer Internship
Minimum of one month duration (Compulsory)

In its efforts to increase the exposure of the Master degree students of the department to social realities and to expose them to the realities of the labour market, the Department of Analytical and Applied Economics proposes an 'Academic Internship' as an integral part of the MA programme. The Internship Certificate will carry 02 (two credits) for successful completion of a mandatory one-month internship in any organization engaged in commodity production or service sector. Students are expected to complete the tenure of internship during the summer vacation after completing their 2nd Semester course. The necessary skills acquired by students before they can undertake the internship are analytical comprehension on micro and macroeconomic problems, basic mathematical and statistical tools taught in the QT-1 and QT-2 papers, and a paper on Research Methods and Computing. The basic features of the internship are as below.

- Students with approval from their mentors may start identifying suitable organisations/institutions and initiate communication with them during their second semester in the MA Programme.
- The department shall also take adequate steps to create awareness among potential employers about the internship programme.

- Students can undertake internship in any organisation registered through Companies Act, Societies Act, government agencies, educational institutions, professional association of academic bodies, media houses, banking sector, PRIs and so on.
- At the end of the internship, students need to submit a joining report and completion certificate verified and acknowledged by the head of the institution/organization where internship is carried out.

Semester III

Paper HCE301

Basic Econometrics

Course Objectives:

1. To introduce the relevant econometric theory and explaining the theory with examples
2. To understand Classical Linear Regression Models and regression diagnostics
3. To develop an intuitive understanding of the material that will allow these econometric tools to be utilized effectively and creatively.

Course Outcomes:

On successful completion of this Course, students will be able to

1. learn various basic econometric methods, estimation methods and related econometric theories; and
2. apply these methods to data or econometric modeling techniques.

Paper CEE301

International Economics

Course Objectives:

The objectives of this course are to provide the students with thorough analytical understanding of

1. the theories of international trade, gains from trade and its distribution;
2. effects of trade policy and regional trading blocs; and
3. BOPs and its adjustments.

Course Outcomes:

On successful completion of this course, the students will be able to

1. analyse and apply the trade theories and theories of tariff;
2. apply and analyze the different policies for BOPs adjustments of developing countries like India; and
3. comment critically on and participate in current debates on international economic policy.

Paper AEE301

Agricultural Economics

Course Objectives:

1. To impart knowledge on applications of economic theories in agricultural sector,
2. To make students understand the linkage between agriculture and other sectors of the economy.
3. To impart knowledge on new developments in the policy paradigms related to agricultural sector.

Course Outcomes:

After completing the course, the students are expected to have

1. deeper knowledge on different theories related to economic development and the agricultural sector; and
2. increased interest to undertake research activities related to aspects of agricultural sector in India and Odisha.

Paper FEE301

International Finance

Course Objectives:

1. To educate the students on different terms and concepts in international finance like exchange rate and interest rate determination and forecasting, different forms of derivatives and its uses, different financial risk in international market,
2. To enhance the skill of the student to understand the activities in international market.

Course Outcomes:

On successful completion of this Course, students will be able to:

1. appreciate the functioning of the international financial markets and its management and the determination of different exchange rates; and

2. understand the way the foreign exchange market and the derivatives markets and the capital markets function using futures, options and swaps

Paper FEE302 Computational Economics

Course Objectives:

1. To teach different aspects and steps involved in undertaking a research work in social sciences.
2. To enable the students for using computers for data analysis and thesis writing.
3. To build capacity of the students on using two popular computational packages such as SPSS and STATA widely used in industry.

Course Outcomes:

On successful completion of this Course, students will have

1. increased ability to observe social realities with the lens of a researcher;
2. increased number of students opting for dissertation in the fourth semester; and
3. increased employability of students in research organisations and corporate sector.

Paper FEE303 Health Economics

Course Objectives:

1. To introduce relevant theory of microeconomics and demonstrate its applicability to health care issues
1. To outline key principles of health economics including efficiency and equity
2. To provide a foundation for and rationale for performing economic evaluation

Course Outcomes:

On successful completion of the course, students will be able to

1. gain knowledge of the key analytical reasoning and tools of health economics and their normative foundations and ethical implications; basic economic theories and models of regulation applied to health care providers as hospitals and long-term care organizations and the health-related behavioral determinants and an overview of some recent policies aimed at improving the populations' lifestyles;
2. use economic models to understand behaviors of actors in the health care sector, do analyses of needs for health care services, make analyses of efficiency and quality of health care organizations, find and utilize relevant data sources describing and use relevant econometric models for the analysis of the economic agents' behaviour; and
3. attain competence to apply economic concepts and models to the fields of demand for health, demand for health services, demand for health insurance, provision of health insurance and provision of health care, competence to describe, analyse and critically address economic aspects of health care organizations

SEMESTER IV Paper CEE401 Economics of Environment

Course Objectives:

The objectives of this course are to provide the students with thorough analytical understanding in the

1. application of economic theories for environmental issues; global environmental externalities and climatic change; and
2. valuation of environmental goods; economics natural resources.

Course Outcomes:

On successful completion of the course, students will be able to

1. apply economic principles for applied environmental issues; and
2. select and apply appropriate economic techniques to solve environmental problems and measure value of environmental goods.

Paper CEE402 Dissertation

Presentation: 50 Marks and Hardcopy of Dissertation: 50 Marks

Paper CEE 403 Rural Economics

Course Objectives:

The objectives of this course are to provide the students with thorough analytical understanding of the

1. basic concepts, elements, determinants and theories of rural development; and
2. policies and strategies for rural development .

Course Outcomes:

On successful completion of the course, students will be able to

1. explain and analyse the concepts of rural development; and
2. critically comment on and participate in current debates on rural development issues in India.

Paper AEE401 Financial Institutions and Market

Learning Objectives:

1. To educate the students on different terms and concepts in financial institutions and market like commercial and central bank, monetary policy, money and capital market.
2. To enhance the understanding of the students about organisation, operation and growth of financial systems.

Learning Outcomes:

On successful completion of this Course, students will be able to

1. understand the financial system: its structure and functions and equilibrium;
2. understand the way the different rates of interests are determined;
3. appreciate the functioning and importance of different banking and non-banking financial institutions and their role in a developing economy; and
4. explain the role and structure of money and capital markets.

Paper AEE 402 Mathematical Economics

Course Objectives:

1. To impart skills in using mathematics as a language of communication and expression for economic analysis.
2. To build capacity of students for applying different mathematical tools such as game theory, linear/non-linear programming and general equilibrium models in economics research.

Course Outcomes:

On successful completion of this Course, students will be able to

1. increased use of quantitative and mathematical tools in research activities; and
2. increased employability of students in organisations engaged in economic research.

Paper AEE 403 Advanced Econometrics

Course Objectives:

1. To provide a basic understanding of limited dependent variable models, Simultaneous Equation Models and Time series Econometric Models.
2. To introduce the relevant econometric theory and explaining the theory with examples.
3. To develop an intuitive understanding of the material that will allow these econometric tools to be utilized effectively and creatively.

Course Outcomes:

On successful completion of this Course, students will be able to

1. learn various advanced econometric methods, estimation methods and related econometric theories;
2. apply these methods to data or econometric modeling techniques; and
3. use software packages to estimate econometric models, interpret econometric estimates and analyze the results.

Paper AEE 404

Economics of Gender and Development

Course Objectives:

1. To provide a critical overview of economic theories, methods and economic policy-debates from a gender perspective.
2. To cover major debates in gender economics relevant to developed and developing countries.
3. To analyse orthodox economic theory and provides students with a gender-critique.
4. To explore alternative feminist economic theory and apply these different theoretical understandings to concrete examples in the real world.

Course Outcomes:

On successful completion of the course, a student should be able to demonstrate the ability to

1. demonstrate a general understanding of the theoretical debates surrounding the construction of gender and gender relations in the discipline of economics;
2. critically examine and assess mainstream and heterodox economic theories and policies from a gender perspective;
3. evaluate the ways in which current economic realities in developed and developing countries have different effects on men and women; and
4. identify the connections between feminist economic theory and feminist economic reality in developed and developing countries.

Paper AEE 405

Financial Inclusion and Economic Development

Course Objectives:

The objectives of this course are to provide the students with thorough understanding of

1. financial inclusion and exclusion, relation between financial inclusion and economic development; and
2. role of financial institutions, micro finance and micro insurance in financial inclusion.

Course Outcomes:

On successful completion of this course, the students will be able to

1. learn and analyse the dimensions of financial inclusion, the progress of financial inclusion in India; and
2. analyse the complexities associated with financial inclusion in India.