

UNIVERSITY OF SCIENCE AND TECHNOLOGY, MEGHALAYA

DEPARTMENT OF ECONOMICS

Masters in Economics

Programme Objectives (PO):

PO: The programme aims at developing a holistic knowledge of the subject.

PO: The programme also emphasizes in data analysis and data management by training the students on some statistic software.

PO: The programme aims at developing the powers of inquiry, critical analysis, logical thinking, and ability to apply theoretical knowledge to current issues of policy and practice in economics.

PO: The programme aims at enabling the students to practically utilize their knowledge in different socio-economic and political issues.

PO: This programme creates well equipped manpower to cope up with the dynamic as well as challenging upcoming issues and threats to the economy.

PROGRAMME SPECIFIC OUTCOMES (PSO)

PSO1. Provide instruction and rigorous training in economics and the relevant methods of mathematical economics and econometrics research in this area.

PSO2. Develop the powers of inquiry, critical analysis, logical thinking, and your ability to apply theoretical knowledge to current issues of policy and practice in economics.

PSO3. Encourage initiative, independent learning, awareness of analytical and theoretical approaches in the field of economics, exposure to recent research and state-of-the-art tools in applied work in economics;

PSO4. Research methods and core skills in microeconomics, macroeconomics, econometrics, mathematical economics, problem-solving, written and oral expression, communication and presentation skills;

PSO5.Equip the student with the intellectual apparatus and practical skills necessary for an economist working in private or public organizations

PSO6. Enable the students to apply advanced research skills to a relevant research area in economics, via course units and a dissertation

Course Outcomes:

MEC-101 MICRO ECONOMIC ANALYSIS – I SEMESTER-I

- **CO1.** By the end of the course, students will have some idea to apply supply and demand analysis to examine the impact of government regulation.
- **CO2.** Students will be able to explain and calculate price elasticity of demand and other elasticity.
- **CO3.** By the end of the course, students will be able to demonstrate an understanding of producer choice, including cost and break-even analysis.
- **CO4.** Students will be able to understand the concepts of opportunity cost, trade-offs, and the benefits of exchange.
- CO5: The students will be able to understand the concept of risk, and decision making process of producer and consumer under uncertainty.

MEC- 102 MACRO ECONOMIC ANALYSIS-I SEMESTER-I

- **CO1.** After study of this unit students will understand the flow of income in different macroeconomic sector of the nation i.e. flow of income from house hold to farm, from household to government or to foreign sector.It analysis how national income is calculate, i.e. what to include and exclude to determine the national income (GDP, GNP etc.). How to make the social accounting to get benefit of increase in national income.
- **CO2.** This unit include the famous "Keynes psychological law of consumption" indicating the relation between consumption and income.It also tries to make a relation between the consumption, income and investment through investment multiplier theory.
- **CO3.** This unit introduces the students about the sources and controller of money supply. The theory of high powered money shows, how the money supply can influence the economy and how the apex monetary authority measure the supply of money.
- **CO4.** This unit analysis the different classical and modern concept of demand for money. The land mark definitions of fisher and other Cambridge economist and Keynes also discussed here.
- **CO5.** Keynes liquidity preference theory of money, which shows in which motive people demand for money. How liquidity trap happens and how it destroys the economic growth.

MEC- 103 ECONOMICS OF GROWTH AND DEVELOPMENT-I SEMESTER-I

- **CO1.** By the end of this course, student willget essential concepts of growth as well as Development.
- **CO2.** By the end of this course, student willunderstand the diverse dimension and measures of development.
- **C03.** By the end of this course, student willlearn about the distributional issues of growth and development.
- **C04.** By end of this course, student willexplore the developmental theories that help to address the current challenges of development.

CO5: It will enable the applicability of various development theories and index in real life situation

MEC- 104 MATHEMATICAL METHODS FOR ECONOMIC ANALYSIS SEMESTER-I

- **CO1:** Develop different tools and techniques of integration and its application in different areas of economics particularly in Consumer's surplus and producer's surplus.
- CO2: It gives an idea about different techniques of game theory and its use in different areas of practical life.
- **CO3:** To develop different technique and tools to address the long term dynamic variables.
- **CO4.** Develop linear programming (LP) models and solve the problems using graphic method and simplex method.
- **CO5**. The students gets an idea of applicability of mathematics in Economics, mathematical derivation of various economics theories.

MEC-105

POLITICAL ECONOMY

SEMESTER-I

- **CO1.** Enable to realize the context of Economic Theories and Ideas.
- **CO2.** Help to have a holistic understanding of history of Economic thoughts.
- CO3. Inculcate the sense of critical thinking about the economic ideas and find ways to build new.
- **CO4.** Realization of how economic system works under different political theories.
- **CO5.**The students will get idea on the present conflict of world relating them to various schools of thoughts of economics.

MEC- 201 MICRO ECONOMIC ANALYSIS – II SEMESTER-II

- **CO1** Students will be able to demonstrate knowledge of the laws of supply and demand and equilibrium; and apply the supply and demand model to analyze responses of markets to external events
- CO2 By the end of the course, students will be able to demonstrate an understanding of producer choice, including cost and break-even analysis
- CO3 By the end of the course, students will be able to compare and contrast common market structures, including perfect competition and monopoly
- **CO4.** By the end of the course, students will be able to apply microeconomic principles and models to define and address market failures; and to describe issues such as wage inequality, environmental protection or other policy matters.
- CO5. Gives a complete knowledge of various market concentration and competitive level

MEC-202 MACRO ECONOMIC ANALYSIS-II SEMESTER-II

CO1. This unit makes a comparative study between classical and modern thought about macroeconomic issues and how macroeconomics got change overtime.

- **CO2.** This unit discuss about the general equilibrium in the economy through product market and commodity market equilibrium. It also discusses how the general equilibrium get disturb by change in fiscal and monetary policy.
- **CO3.** This unit analyzes the demand for money in modern sense, where a number of economists has given a number of views regarding the demand for money. Majority of the followers of Keynes has interacted with new issues about the demand for money. It throws light on the prospects how demand for money got changed over time.
- **CO4.** This unit analyze about the inflation and general price level. Different theories of inflation, its causes and effects and remedies .the relations between the price rise and unemployment and how many times we have to compromise with the high price to ensure the unemployment level low.
- **CO5.**It makes aware about the business cycles, how and what situation it happens and the balance of payment of the country, in fact shows the economic status of the country.

MEC- 203 STATISTICS SEMESTER-II

- **CO1.** Students who successfully complete this course should be comfortable with basic statistics and probability. Students learn to understand different data types and their organization, management and presentation.
- **CO2.** Analyze statistical data graphically using frequency distributions and cumulative frequency distributions. And to analyze and apply statistical data using various measures of central tendency and dispersion.
- CO3. Use and apply the basic probability rules, including additive and multiplicative laws, using the terms, independent and mutually exclusive events
- **CO4.** Student learns to calculate and interpret the correlation between two variables, to calculate simple linear regression equation for a set of data and to evaluate the properties of estimators.
- **CO5.** Given a problem situation be able to state appropriate null and alternative hypotheses and appropriate means that whether it should be one or two sided and be able to calculate a p-value and be able to interpret a p-value. Based on the results students will be able to state the relationship between population and statistics (one or two sided and perform a hypothesis test and state the conclusion with a sentence.

MEC- 204 BASIC ECONOMETRICS SEMESTER-II

- CO1. Enables the skill to fill the gap between being "a student of economics" and being "a practicing economist"
- **CO2.** Develops the institution about how the systems work in real world.
- CO3. Generates the technique and skill of analyzing data and creating economic models for development and wellbeing.
- CO4. Technical and analytical knowledge to provide specialist advice to people from various disciplines of knowledge.
- **CO5.** To solve a variety of economic problems of day to day life. Understand the subject of econometrics and its applications.

MEC- 205 WELFARE ECONOMICS SEMESTER-II

- **CO1:** It tries to give an idea about the labour market and how price of labour is determined in different forms of market has been captured. Student will be able to know easily why and to what extent labours are exploited in different market structure and its remedy measure.
- **CO2**: It focuses to understand the general equilibrium concept as well as critiques of welfare economics. It also tries to provide contribution of welfare economist for further development of welfare economics.
- CO3: It basically highlights the different views and approaches of welfare economics. Students will be able to understand how and to what extent the policy change in government level will affect the overall welfare of the society and how can we maximize social welfare through our activities.
- **CO4:** The end of the course the student will learn concept of new welfare economics. Student will be able to learn different economist about new welfare economics.
- CO5. Understand the concept of externality, type of externality and how to solve the problem of externality.

MEC- 301 PUBLIC ECONOMICS SEMESTER-III

- CO1. To understand the role of government and the different ways in which government policies affect economy.
- CO2. Develops analytical framework that facilitates the evaluation of public policy and subsequently inform the public debate.
- **CO3.** Enables to understand the policy design on economy and their efficiency.
- **CO4.** Develop administrative skill with the knowledge of government taxation and expenditure mechanisms.
- **CO5.** Understand the different types of budgets and their implications.

MEC- 302 ECONOMICS OF SOCIAL SECTOR SEMESTER-III

- **CO1.** This course tries to understand the concept of Economics of education that will focus on importance of investment in education to increase human capital. It also gives lights on direct and indirect benefits of education in development of society.
- CO2. Student will understand the educational financing from the point of view of Economics
- **CO3.** Student will explore approaches of economic theory to health sector.
- CO4. Policy level understanding for improvement of health sector from economics prospective.
- **CO5.** Get an idea on various scopes to do research on education and health sector by applying the different economics theories.

MEC- 303 ECONOMICS OF GROWTH AND DEVELOPMENT-II SEMESTER-III

- **CO1.** Understand and describe the important features of less developed economies and their development challenges.
- **CO2.** Understand and apply key development economic growth theories, international trade development theories, and related economic development theories.
- CO3. Analyze and comment significant policy options available to government and international organization to address economic development challenges.

- **CO4.** Develop analytical and critical thinking skills along with model building and use them to judge the appropriateness of economic development policy options.
- CO5. Identify different problems of policy failures, appraise economic development and suggest alternatives for development.

MEC- 304(A) LABOUR ECONOMICS SEMESTER- III

- **CO1.** Understand the basic concepts of demand and supply of labour, labour market, employment, unemployment, wages and migration.
- **CO2.** Be able to combine theoretical models and empirical results to address policy issues related to employment, unemployment, wages and migration and be able to advise on labour market policies from a position of knowledge.
- **CO3.** Be able to understand recent research works in empirical labour economics, to assess their relevance, contribution and reliability and to connect them with existing results and open policy questions.
- **CO4.** Model and analyze the structure of labour markets and its frictions; analyze the interactions between aggregate economic forces and identify the role of firms, workers and government in the economy especially in India.
- **CO5.** Apply advanced econometric tools to analyze labour market related processes and develop practical understanding of statistical inference issues.

MEC-304(B) RESEARCH METHODOLOGYAND REPORT WRITING SEMESTER-III

- CO1.By end of the course student will be able to develop understanding on various kinds of research, objectives of doing research, research process, research designs and sampling.
- CO2. Student will have basic knowledge on qualitative research techniques
- CO3.By end of the course student will have adequate knowledge on measurement & scaling techniques as well as the quantitative data analysis.
- CO4. It will provide basic awareness of data analysis-and hypothesis testing procedures.
- CO5.Develop research skills and skills in persuasive oral and written argument, including data collection, interpretation and demonstrated ability to support analysis through empirical evidence and draw critical conclusions and presentation skills.

MEC- 304-C INDUSTRIAL ECONOMICS SEMESTER-III

- **CO1:** perform supply and demand analysis in input factor markets with varying market structures.
- **CO2**: Define the structure of various organizations relating to trade, like private, public, joint stock company etc.
- CO3. calculate the minimal cost input factor quantities for a firm and optimal selling prices, supply quantities and resulting profits of firms in different market structures (including perfect competition and various forms of imperfect competition, like monopolies, oligopolies, and monopolistic competition)
- **CO4**: analyze the interaction between consumers and firms; apply the concept of market equilibrium. calculate welfare measures such as consumer surplus and social welfare; market concentration.

CO5. Calculation welfare measures such as consumer surplus and social welfare; market concentration with different index.

MEC- 304(D) DEMOGRAPHY SEMESTER-III

CO1: It tries to explore the relationship between development and population growth. Students will be able to know the different models, theories about the relationship between population growth and development

CO2: It tries to explore the trend and growth of world population and different aspects of world population growth. It enriches the knowledge of changing components of world population.

CO3: Fertility and Mortality are the two important factors for change in population in a particular region. It gives an idea about calculation of different rates of fertility and mortality.

CO4: It demonstrates the international and internal migration of India. Students will be able to know the factors responsible for internal and international Migration.

CO5. The students will be able to relate the changes in social and political economy due to demographical changes.

MEC-305 (MDC-I) SEMESTER-III

CO1: Demonstrate a basic knowledge of the role of markets and market failure with regards to the allocation of natural resources and environmental amenities.

CO2: Understanding of the effects and relative merits of public environmental policy efforts, including cap-and-trade schemes, Pigouvian taxes, regulation, and public ownership and/or management

CO3: Population growth and the environment

Global warming, Wilderness protection and related public lands issues, Air pollution and carbon bank.

CO4: Concepts of Pareto optimality, efficiency, and equity, the role of property, property rights and common property resources.

CO5. The students will be able to understand the concept of carbon bank, and international trading with carbon.

MEC- 401 INDIAN ECONOMY SEMESTER-IV

- CO1. Wide and holistic understanding of India's Economic structure.
- CO2. Develops knowledge of India's economic potential and weakness.
- **CO3.** Develops sense of policy diversification and way forwards.
- **CO4.** Understand the country where we live and the ways to make it better place.
- **CO5**. Understand the role of India in different international organizations.

MEC- 402 FINANCIAL ECONOMICS SEMESTER-IV

- CO1. By end of course, student will understand the Indian financial system and its relationship with Economic growth.
- **CO2.** By end of course, student will learn the instruments of Money markets and intermediaries of money markets.
- **CO3.** By end of course, student will understand the capital market instruments.

- **CO4.** By end of course, student will learn different types of stock markets.
- **CO5.** By end of course, student will explore the valuation of financial assets and banking and capital market reforms.

MEC- 403 INTERNATIONAL ECONOMICS SEMESTER-IV

- **CO1:** Be familiar with the main economic theories and models of international trade,
- **CO2:** Have an elementary understanding of open-economy macroeconomics and the determinants of exchange rates and the balance of payments.
- **CO3:** Be aware of the likely distributional consequences of trade and thus of conflicting interests within an economy regarding trade liberalization,
- **CO4:** Understand economists' arguments concerning trade policy and its analysis, and to apply economic reasoning to issues of the day surrounding globalization,
- **CO5.** The students understand the working pattern of various international organizations to address specific global problems.

MEC 404 ECONOMICS OF ENVIRONMENT SEMESTER-III

- **CO1**: Utilize economic principles and models to address private and public policy issues related to allocating natural resources and environmental amenities.
- CO2:The role of externalities, common property resources, and public goods, Concepts and measures of economic value including non-market valuation
- **CO3**: Gain a basic understanding of the effects and relative merits of public environmental policy efforts, including cap-and-trade schemes, Pigovian taxes, regulation, and public ownership and/or management
- **CO4**: Become knowledgeable about and be able to use economic principles and non-market valuation techniques to address a variety of continuing and contemporary natural resource and environmental issues.
- CO5. Understand the concept of climate change, pollutions, carbon bank, trading and environment etc.

MEC- 405 (A) AGRICULTURAL ECONOMICS SEMESTER-IV

- CO1: It tries to explore the condition of agricultural labor in India and different aspects of agricultural labour in India.
- CO2: It focuses on need and importance of agricultural credit and different sources of agricultural credit and the problems faced by the farmers in India.
- CO3: It tries to give the idea about the present scenario of Agriculture markets of India and its related problems.
- **CO4:** It tries to explore the trend and pattern of agricultural growth of India. Attempt has been made to capture the public investment and technological change in India.
- **CO5.** Get an idea of various scheme of agriculture and methods of intensive agriculture and its impact.

MEC- 405(B) ADVANCED ECONOMETRICS SEMESTER-IV

- CO1. Enable to understand the new programs and tools invented in the field of Econometrics.
- CO2. Use the computer software's to analyze data.

- CO3. Interpretation and finding the solutions of complex economic problems.
- CO4. Much deeper understanding of econometrics and its dimensions.
- CO5: Enable the students in building model to address certain economics issues

MEC- 405(C) ECONOMY OF NORTH EASTERN REGION SEMESTER-IV

- **CO1.** By end of the course, student will learn about the overview of North East India.
- CO2. By end of the course, student will explore the available natural resources of North East India.
- **CO3.** Student will learn different sector of North east economy that will help to address the problem of north east economy and can develop research on North East Economy.
- **CO4:** Student can understand structural transformation of North East India. It will provide research scope for evaluation of recent policy in the North East India.
- CO5. Students get an idea of various scope of development in North East India, and what are the limitations of the area.

MEC- 405 (D) OPERATION RESEARCH SEMESTER-IV

- **CO1.** Understand the basic concepts of operations research, its scope, methodology and limitations.
- **CO2.** Understand and know the various techniques of operations research and to translate a real word problem, given in words, into a mathematical formulation and to analyze the results and propose recommendations to the decision making processes.
- CO3. Develop linear programming (LP) models and solve the problems using graphic method and simplex method.
- **CO4.** Understand and formulate variety of problems such as assignment, transportation; solve this problems using north west corner method, dual transportation method etc. and apply in real life problems.
- **CO5.** Understand different queuing situations and find the optimal solutions using models for different situations; solve the problems using special solution algorithms;

Use CPM and PERT techniques, to plan, schedule, and control project activities.

MEC- 406 MDC II DEVELOPMENT OF ENTREPRENEURSHIP SEMESTER-IV

- **CO1:** The students get the idea of the importance of entrepreneurship, problems and opportunities to develop en enterprise.
- **CO2:** Gives an idea to explore the available opportunities, the formalities to start an enterprise. The importance of financial and technical knowledge to start a venture
- CO3: Knowledge to prepare a business plan, roleof financial, marketing, human resource, social and technical aspects of business plan.
- **CO4:** Gives an idea ofmarketing plan- marketing research, various form of ownership of business job design, manpower planning and budget planning
- CO5: Role of various financial organization and government policies relating to MSMEs