In Partnership With Diversity Learning Institute-DLI & Twikatane e.V Vermany

Bachelor of Arts in Economics (B.Ecom)

Semester 1:

Module Name	Module Code	Teaching Hours	Credits
Introduction to Economics	ECO101	45	3
Microeconomic Principles	ECO102	60	4
Mathematics for Economists	ECO103	45	3
Principles of Accounting	ECO104	45	3
Business Communication	ECO105	30	2
Statistics for Economists	ECO106	45	3

Semester 2:

Module Name	Module Code	Teaching Hours	Credits
Macroeconomic Principles	ECO201	45	3
Economic History	ECO202	45	3
Managerial Economics	ECO203	60	4
Financial Accounting	ECO204	45	3
Quantitative Methods in Economics	ECO205	45	3
Business Ethics	ECO206	30	2

Semester 3:

Module Name	Module Code	Teaching Hours	Credits
International Economics	ECO301	60	4
Economic Development	ECO302	45	3
Econometrics	ECO303	45	3
Public Finance	ECO304	45	3
Research Methods in Economics	ECO305	45	3
Elective 1	ECO306	45	3

Semester 4:

Module Name	Module Code	Teaching Hours	Credits
Monetary Economics	ECO401	60	4
Environmental Economics	ECO402	45	3
Industrial Economics	ECO403	45	3
Banking and Finance	ECO404	45	3
Economic Policy Analysis	ECO405	60	4
Elective 2	ECO406	45	3

Semester 5:

Module Name	Module Code	Teaching Hours	Credits
Labour Economics	ECO501	45	3
Game Theory and Strategic Decision Making	ECO502	60	4
Health Economics	ECO503	45	3
International Trade	ECO504	45	3
Economic Sociology	ECO505	45	3
Elective 3	ECO506	45	3

Semester 6:

Module Name	Module Code	Teaching Hours	Credits
Economics of Innovation	ECO601	45	3
Political Economy	ECO602	60	4
Capstone Project	ECO603	90	6
International Finance	ECO604	45	3
Elective 4	ECO605	45	3
Elective 5	ECO606	45	3

Elective Modules:

1. ECO306 - Behavioral Economics
2. ECO406 - Economic Geography
3. ECO506 - Applied Econometrics
4. ECO605 - Economic Forecasting
5. ECO606 - Comparative Economic Systems

Replace these values with the actual ones provided by your university.

Module Outline:

Module 1: Introduction to Economics (ECO101)

1. Definition and Scope of Economics
2. Basic Economic Concepts (Scarcity, Choice, Opportunity Cost)
3. Economic Systems and Models
4. Microeconomics vs. Macroeconomics
5. Historical Overview of Economic Thought
6. Applications of Economics in Real-world Scenarios

Module 2: Microeconomic Principles (ECO102)

1. Demand and Supply Analysis
2. Elasticity of Demand and Supply
3. Consumer Behavior and Utility
4. Production and Cost
5. Market Structures (Perfect Competition, Monopoly, Oligopoly, Monopolistic Competition)
6. Market Failures and Government Intervention

Module 3: Mathematics for Economists (ECO103)

1. Mathematical Tools for Economics (Algebra and Calculus)
2. Optimization Techniques
3. Descriptive Statistics
4. Probability Distributions
5. Statistical Inference
6. Regression Analysis in Economics

Module 4: Principles of Accounting (ECO104)

1. Basics of Financial Accounting
2. Accounting Principles and Concepts
3. Recording Transactions
4. Financial Statements: Income Statement, Balance Sheet, Cash Flow Statement
5. Analysis and Interpretation of Financial Statements
6. Managerial Accounting

Module 5: Business Communication (ECO105)

1. Basics of Communication
2. Written Communication (Reports, Emails, Business Letters)
3. Oral Communication (Presentations, Meetings)
4. Non-verbal Communication
5. Communication in a Globalized Business Environment
6. Business Etiquette and Professionalism

Module 6: Statistics for Economists (ECO106)

1. Descriptive Statistics (Measures of Central Tendency and Dispersion)
2. Probability Distributions (Normal Distribution, Binomial Distribution)
3. Statistical Inference (Hypothesis Testing, Confidence Intervals)
4. Analysis of Variance (ANOVA)
5. Time Series Analysis
6. Multivariate Data Analysis

The pattern continues for subsequent modules.

Module 7: International Economics (ECO301)

1. Comparative Advantage and International Trade
2. Balance of Payments
3. Exchange Rates and Foreign Exchange Markets
4. International Trade Policies
5. Globalization and Its Impact
6. International Economic Organizations

Module 8: Economic Development (ECO302)

1. Theories of Economic Development
2. Measurement of Economic Development
3. Economic Planning and Policy
4. Poverty and Income Distribution
5. Sustainable Development Goals (SDGs)
6. Case Studies of Successful Development Strategies

Module 9: Econometrics (ECO303)

1. Introduction to Econometrics
2. Simple and Multiple Regression Analysis
3. Violations of Assumptions in Regression Models
4. Time Series Econometrics
5. Panel Data Analysis
6. Applications of Econometrics in Economic Research

The pattern continues for the subsequent semesters and modules.

Module 10: Economic Policy Analysis (ECO405)

1. Role of Government in the Economy
2. Fiscal Policy and Government Expenditure
3. Monetary Policy and Central Banking
4. Economic Stabilization Policies
5. Public Choice Theory
6. Policy Evaluation and Impact Assessment

Module 11: Economic Sociology (ECO505)

1. Introduction to Economic Sociology
2. Social Institutions and Economic Behavior
3. Economic Inequality and Social Mobility
4. Networks and Social Capital
5. Sociology of Markets and Consumption
6. Globalization and Social Change

Module 12: Capstone Project (ECO603)

1. Research Proposal Development
2. Literature Review and Conceptual Framework
3. Data Collection and Methodology
4. Data Analysis and Interpretation
5. Conclusions and Recommendations
6. Presentation of Research Findings

The pattern continues for the elective modules.

Elective Modules (e.g., ECO306 - Behavioral Economics):

1. Introduction to Behavioral Economics
2. Behavioral Biases and Decision Making
3. Experimental Economics
4. Behavioral Economics in Policy
5. Applications in Behavioral Finance
6. Case Studies in Behavioral Economics

(1) How AI can be applied in this course:

In the "AI in Economics" module, students will explore the integration of Artificial Intelligence (AI) in economic analysis, policy-making, and research. The module may cover the following areas:

Predictive Modeling in Economics:

- Introduction to AI algorithms for economic forecasting and predictive modeling.
- Applications of machine learning in predicting economic indicators, such as GDP growth, inflation, and unemployment.

Natural Language Processing (NLP) for Economic Text Analysis:

- Understanding how NLP can be applied to analyze economic reports, policy documents, and financial news.
- Hands-on exercises in sentiment analysis and topic modeling for economic texts.

Algorithmic Trading and Financial Markets:

- Exploration of AI-driven algorithms for automated trading in financial markets.
- Case studies on the impact of AI on stock market analysis, algorithmic trading strategies, and risk management.

Machine Learning for Economic Policy Analysis:

- Application of machine learning models to analyze the impact of economic policies on various macroeconomic variables.
- Evaluating the effectiveness of economic interventions using AI-driven simulations.

Big Data Analytics in Economics:

- Utilizing AI tools for processing and analyzing large datasets relevant to economic research.
- Applications of big data analytics in understanding consumer behavior, market trends, and economic patterns.

AI for Social and Economic Networks:

- Examining how AI can be used to model and analyze social and economic networks.
- Studying the role of AI in understanding and predicting economic interactions among individuals and organizations.

(2) Advantages of applying AI in this course:

Improved Forecasting Accuracy:

- AI enhances the accuracy of economic forecasting by processing large datasets and identifying complex patterns, contributing to more reliable predictions.

Efficient Data Processing:

- AI algorithms enable the efficient processing of vast amounts of economic data, providing economists with timely and relevant information for analysis.

Enhanced Policy Simulation:

- AI-driven simulations allow economists to model and simulate the potential outcomes of different economic policies, helping policymakers make informed decisions.

Automated Data Extraction and Analysis:

- AI tools automate the extraction and analysis of economic data from various sources, saving time and resources in economic research.

Advanced Text Analysis:

- NLP applications in economic texts provide economists with tools to analyze sentiments, extract valuable insights, and understand public perceptions related to economic issues.

Optimized Trading Strategies:

- Understanding AI in algorithmic trading empowers economists to develop and optimize trading strategies, contributing to more efficient financial markets.

Innovative Economic Research:

- Incorporating AI in economic research opens new avenues for innovative studies, allowing economists to explore complex relationships and dynamics in the economy.

By integrating AI into the study of economics, students gain valuable skills that are increasingly relevant in the evolving landscape of economic research, policy analysis, and decision-making. This knowledge prepares them for a future where technology plays a crucial role in shaping economic outcomes and understanding complex economic phenomena.