COMSBC04 - Trade Analytics

Master of Commerce
Skill Based Course: Trade Analytics

Course Type/ Course Code	Course Title	Lectures	Tutorials	Practical	Credit	Pre-requisites
COMSBC04	Trade Analytics	1	0	1	2	NIL

Objective: The objective of the course is to equip learners with the ability to systematically analyse international trade data using quantitative methods and trade indices. Students will learn to identify and interpret key trade performance indicators. They will also gain practical skills in data pre-processing, visualization, and predictive Modelling.

Learning Outcomes: After the completion of the course, the learners will be able to:

- identify the key data sources and classify the international trade data
- analyse and interpret trade performance indices
- apply descriptive and predictive analytics tools to analyse trade patterns
- design visual and statistical trade dashboards using tableau

Contents:

Unit I **(7 Hours)**
Key Indices to measure trade competitiveness - Revealed Comparative Advantage, Export Import Concentration (Herfindahl-Hirschman Index (HHI); Theil Index), Trade Complementary Index; Data Sources – bilateral and multilateral trade data, HS Codes.

Unit II **(8 Hours)**
Public Databases (UN Comtrade, ITC Trade Map, World Bank WITS). Data Cleaning and pre-processing, Descriptive and predictive analysis (seasonal and trend analysis), Data Visualization.

Practical Exercises:

- Download and clean trade data from UN Comtrade or ITC; standardize HS codes, currencies, and handle missing values.
- Compute Revealed Comparative Advantage for selected products and analyse export competitiveness.

- Measure export concentration using the Herfindahl-Hirschman Index across products and partners.
- Assess the compatibility of export supply with import demand between two countries.
- Create an interactive dashboard showing top products, partners, and trade trends using Tableau or Power BI.
- Compile a trade profile using indices, analytics, and visualizations; summarize insights in a professional report.

Suggested Readings:

- WTO World Trade Report
- OECD Trade Policy Papers

Note: Suggested readings will be updated by the Department of Commerce and uploaded on Department's website.