

St. Xavier's College (Autonomous), Ahmedabad

FACULTY OF ARTS

DEPARTMENT OF ECONOMICS (SF)

BA. Hons. (Economics) SF

SEMESTER-2

SEC: Analysis using Excel

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title & Code	Credit Distribution of The Course			Eligibility Criteria	Pre-requisite(s) of the Course (if any)
	Lectures	Tutorial	Practical / Practice		
Analysis using Excel (ECHSE221C)	0	0	2	10 + 2 from a recognized board in any stream	None

Learning Outcomes (LO)

1. Understand and apply core Excel formulas—including logical, statistical, lookup, text, and date functions—for efficient data handling and analysis.
2. Demonstrate proficiency in advanced formula techniques such as array formulas, formula-based formatting, and special functions to solve complex data problems.

Course Outcomes (CO)

1. Students will be able to independently perform data analysis tasks using a wide range of Excel functions and select the appropriate formula for a given analytical need.
2. Students will be able to create dynamic, automated, and error-free spreadsheets using advanced Excel tools, improving accuracy, efficiency, and decision-making capability.

UNIT 1: Core Excel Functions and Data Handling

Excel formulas basics: syntax, reference types, common errors, auditing tools, keyboard shortcuts

Conditionals & logical operators: IF, AND, OR, NOT, ISERROR, ISNUMBER, etc.

Basic statistical functions: MAX/MIN, RANK, RAND(), SUMIFS, COUNTIFS, SUMPRODUCT

Lookup & reference functions: VLOOKUP, HLOOKUP, INDEX/MATCH, OFFSET

Text functions: TEXT, VALUE, LEFT, MID, RIGHT, SEARCH, TRIM, LEN

Date & time functions: DATEVALUE, TODAY, NOW, DATEDIF, YEARFRAC, EOMONTH

UNIT 2: Advanced Excel Formula Techniques

Formula-based formatting: creating and managing conditional formatting with formulas

Array formulas: vertical/horizontal arrays, double-unary technique, TRANSPOSE

Additional/bonus functions: HYPERLINK, INDIRECT, WEBSERVICE, FILTERXML

Suggestive Reading

- Material & Links will be provided in the class.