# **Excel - Basics (CCO1)**

### **Approximate Duration of the course:** 30-40 hours

# **Objectives:**

MS Excel - Basics covers the basic terminology required to work in MS Excel environment. It also covers the mathematical and logical operations required to work in MS Excel as an accounting package. It covers the workbook management functions like create, add and rename worksheet. Moreover, it covers the topics for worksheet management, data privacy and data security. Course also covers the topics

Regarding formatting and references of cells on a worksheet. Along 'with this this course also covers the different formulas and functions being very important integral part of any accounting software. Sorting arid filters are also well explained with examples for the better understanding of the concepts. Finally, the course covers the topics which are important for the file management create, close, open and save a file etc.

#### **Outcomes:**

- 1. Create a worksheet; Know the features of worksheet; Adding and renaming worksheets.
- 2. Define a Toolbar; define formatting and editing toolbar; different styles of Fonts; setting Background colors; concept to Merge cells; various type of Number formats; methodology of cell references (column and row).
- 3. Put formulas and functions in an Excel Worksheet; Practice addition, multiplication etc. in day-to-day work.; Work with manipulation on dates; Use cell referencing as per the requirements; Use lookup functions; Use paste functions; Understand the difference between formulas and a function.
- 4. Recognize and understand many of the functions in Microsoft Excel; sort the dates in ascending and descending order; learn how to show and hide the rows and columns; how to add filters to the data; removing the filters from the data; and using pivot tables as a data summarization tool learn how to create, change interactively, delete or copy a pivot table.
- 5. Understand various Toolbars; Creating A Workbook; To save a Workbook; Opening a Workbook; Closing a Workbook.

### **UNIT 1-WORKING WITH WORKSHEETS**

- 1.0 Introduction
- 1.1 Objectives
- 1.2 Features
- 1.3 Create worksheets.
  - 1.3.1 Entering Data
  - 1.3.2 Editing in a worksheet
- 1.4 Add and rename worksheet.
  - 1.4.1 Adding a worksheet.
  - 1.4.2 Rename worksheet.
- 1.5 Customize worksheets.
  - 1.5.1 Select one or more worksheets.
  - 1.5.2 Select the last cell of a worksheet.
  - 1.5.3 Insert page numbers in the worksheet.
  - 1.5.4. Protecting worksheet in a workbook
- 1.6 Add and remove columns and rows

#### **UNIT 2-FORMATTING AND EDITING**

- 2.0 Introduction
- 2.1 Objectives
- 2.2 Formatting Toolbars
- 2.3 Fonts
- 2.4 Background Colors
- 2.5 Merge Cells
- 2.6 Number Formats
- 2.7 Cell references (Column and row)

### **UNIT 3 FORMULAE'S & FUNCTIONS**

- 3.1 Objectives
- 3.2 Introduction
- 3.3 Calculation formulae
  - 3.3.1 Addition, AutoSum
  - 3.3.2 Multiplication
- 3.4 Date functions
  - 3.4.1 TODAY function
  - 3.4.2 DATE function
- 3.5 Inserting formulae and functions in the worksheet
- 3.6 Cell reference
- 3.7 Paste Function
- 3.8 VLOOKUP function
- 3.9 HLOOKUP function

### **UNIT 4 SORTING AND FILTERS**

- 4.0 Objective
- 4.1 Introduction
- 4.2 Sort Date (ascending and descending)
- 4.3 Show and Hide Column and Row
- 4.4 Add Filters
- 4.5 Remove Filters
- 4.6 Pivot Tables

### **UNIT-5 FILE HANDLING**

- 5.0 Objectives
  - 5.1 Understanding File Terms
  - 5.1.1 Standard Toolbar
  - 5.2 Creating A Workbook
  - 5.3 To Save A Workbook
- 5.3.1 To save a new Workbook.
- 5.3.2 To save changes made to an existing workbook.
  - 5.4 Opening A Workbook
  - 5.5 Check Your Progress
  - 5.6 To close a Workbook.
  - 5.6.1 Naming Worksheets
- 5.6.2 Inserting Worksheets
  - 5.6.2.1 To insert a new Worksheet.
  - 5.6.2.2 Deleting Worksheets
  - 5.6.2.3 To delete one or more Worksheets.

# **Subject: Excel Advance (CCO2)**

This course in spreadsheet modeling is an online, web-based, interactive course that is designed to aid business students and practitioners at all levels in using Excel functionality to summarize, report, and analyze data. Furthermore, in today's data-driven environment, companies expect managers to develop spreadsheet models to aid decision making. Because the electronic spreadsheet dominates as the primary tool for analyzing data and modeling business problems, all students should master a core set of skills in using Excel in order to help them solve problems and/or analyze cases in a wide variety of courses from finance to marketing.

This course presumes that students possess a very basic working knowledge of Excel. Upon completion of the spreadsheet-modeling course, students should be able to use Excel to effectively analyze data and develop models for business analysis that will greatly facilitate their coursework.

For example

Target Audience: Any graduate and management students with basic working knowledge of Excel

**Approximate Duration of the course:** 30-45 hours.

### **Course Objectives:**

- Creating pro forma income statement and balance sheet models in accounting.
- Developing valuation and portfolio optimization models in finance.
- Analyzing pricing issues, estimating customer lifetime value, or summarizing a market research survey in a marketing class.
- Developing an aggregate planning model or analyzing sales data to develop an inventory strategy in an operations management class.

# Framework of the course:

- a) **Teaching Learning:** For delivery of the course, it expected to use L (Lecture) + T (tutorial) + P (Practical) Pattern. Tutor of the course delivers lecture of 1 hours and conduct tutorial/Practical of 2 hours wherein participants solve examples/problems/practicals on their own or with the help of the tutor.
- b) Evaluation: Class work, Assignments, and written examination.

#### A) Excel Functions

- > Excel Statistical Functions
- Conditional Counts
- Conditional Sums
- Removing Duplicates
- ➤ Sorting in Excel
- > Filtering Data
- Subtotals
- ➤ Pivot Tables
- ➤ Pivot Charts
- > Conditional Formatting: The Formula Option

### B) Charts

- Creating Charts
- ➤ Moving and Resizing Charts
- ➤ Basic Formatting of Charts
- > Formatting Axes and Data Series
- Customizing Charts

### C) Importing Data into Excel

- > Importing from a Text or Word file
- > Using Web Queries to Import Data from the Web

### D) The Art of Spreadsheet Modelling

- > Model Building Blocks
- ➤ Model Terminology
- ➤ The Spreadsheet Model Building Process
- ➤ Rules to Guide Intelligent Modeling
- Building a Model
- > Set up the Spreadsheet Model
- One-Way Data Tables
- ➤ Two-Way Data Tables
- ➤ Goal Seek
- > Auditing
- > Flexibility
- Using Comments and Text Boxes
- > Error Trapping
- ➤ Using F9 and Evaluate-Formula Feature
- Scenarios
- > Spinners
- ➤ Model Limitations

# E) Using Excel Solver

- > Solving Optimization Problems
- Developing a Solver Model
- ➤ Configuring Solver to Find Solutions

#### F) Three-Dimensional Formulas and the Table Feature

- > Three-Dimensional Formulas
- ➤ Using the Excel Table Feature
- > Circular References

# **G) Monte Carlo Simulation**

- Uncertainty and Monte Carlo Simulation
- ➤ Random Variables

# **Business Communication Skills (CCO3) - New**

### **Objectives of the course:**

This course is designed to provide an overview of the broad categories of Business communication and to impart knowledge in oral and written communication to help them develop their managerial communication competence.

By the end of this course, students should be able to:

- Understand and demonstrate the use of basic and advanced proper writing techniques that today's technology demands, including anticipating audience reaction,
- Write effective and concise letters and memos,
- Prepare informal and formal reports,
- Proofread and edit copies of business correspondence.
- Use career skills that are needed to succeed, such as using ethical tools, working collaboratively, observing business etiquette, and resolving workplace conflicts,
- Plan successfully for and participate in meetings and conduct proper techniques in telephone usage,
- Use e-mail effectively and efficiently, and
- Develop interpersonal skills that contribute to effective and satisfying personal, social and professional relationships.

#### **SYLLABUS**

### Unit 1 – Introduction.

Importance of communication skills in Business Management. Types of communication: the media and tools of communication. The Communication Process. Barriers and Gateways to communication

#### Unit 2 – Verbal and Non-verbal Communication.

Personal language and body language. Types of managerial speeches: occasional speech; thematic speech. Group Communication in: group discussions, meetings, seminars, and conferences. Art of facing interviews in: selection or placement, appraisal, disciplinary committees and exit interviews.

### **Unit 3 – Written Communication Skills**

Formats for business letters and memos: routine type; sales promotion, bill collection, disciplinary action; persuasive messages; negative messages; job applications. Preparing a professional resume and cover letter, follow-up messages and letters. Internal communication through: memos, minutes, notices, circulars.

Writing effective Business Reports; Digital Communication. Power point preparation; Using Web as a source of knowledge Sharing.

### **Unit 4 – Recruitment and Employment Correspondence**

Drafting the Employment Notice, Job Application Letter; Curriculum Vitae/ Resumes; Joining Interview:

An offer of employment; Job Description; Letter of Acceptance, Letter of Resignation and Promotion, Testimonials and References.

### Unit 5 – Business and Social Etiquette

Professional conduct in a business setting: workplace hierarchy; the proper way to make introductions; Use of courteous phrases and language in the workplace. Professional Image: appropriate business attire; Telephone Etiquette; Table etiquette.

### **Text & References:**

- Business Communication, Raman Prakash, Oxford
- Business Communication for Managers: An Advanced Approach, Penrose, Thomson
- Business Communication, Krizan, Thomson
- Understanding Human Communication, 9/e, Adler R Oxford
- Business Communication- Sethi, Adhikari, Tata McGraw Hill

### **Web Sources**

- www.shkaminski.com/Classes/Handouts/Communication
- www.communicationskills.co.in
- www.hodu.com
- www.writingforresults.net

# Tally ACE (CCO4)

#### **OVERVIEW**

This course is designed to impart knowledge regarding concepts of Financial Accounting. Tally is an accounting package which is used for learning to maintain accounts. As this course is useful for Commerce students to get placements in different offices as well as companies in Accounts departments.

#### **COURSE OBJECTIVES**

- Tally ACE is about understanding basic knowledge of how to maintain books of accounts.
- The course fulfils dream of beginner and will recognize skills of a candidates learning Tally ERP 9. Online assessment will be conducted, and successful candidates will earn a verifiable digital certificate from Tally.
- Tally ACE certifies the candidate as job ready and opens up multiple career opportunities, a certified candidate can opt to become an entrepreneur as well.

#### **COURSE CONTENT**

- Fundamentals of Accounting
- Maintaining Charts of Accounts in Tally.ERP 9
- Maintaining Stock Keeping Units (SKU)
- Recording Day to Day Transactions in Tally.ERP 9
- Accounts Receivable and Payable Management
- MIS Reports
- Goods & Services Tax (GST)
- Recording Vouchers with Tax Deducted at Source (TDS)

#### ASSESSMENT FEATURES

• Assessment Format : Online

Duration : One Hour No. of Exams : One Exam Certification Type : Digital

# **Detailed Syllabus**

# Chapter 1: Fundamentals of Accounting – 6 hours

- > Introduction
- ➤ Accounting Terms
- > Accounting Assumptions, Concepts and Principles
  - Assumptions
  - Concepts
  - Principles
- ➤ Double Entry System of Accounting
- > Types of Accounts
- ➤ The Golden Rules of Accounting
- Source Documents for Accounting
- Recording of Business Transactions
  - The Accounting Equation
  - Recording of Transactions in Books of Original Entry/Journal
  - Use of Debit and Credit
  - Rules of Debit and Credit

- Recording of Business Transactions in Journal
- Ledger
  - Need for Ledger
  - Differences between a Journal and a Ledger
  - Classification of Ledger Accounts
  - Posting from Journal
- Trial Balance
  - Methods of Preparation
- ➤ Subsidiary Books & Control Accounts
  - Cash Book
    - Single Column Cash Book
    - Double Column Cash Book
    - Three Column Cash Book
  - Petty Cash Book
  - Purchase (Journal) Book
  - Purchases Return (Journal) Book
  - Sales (Journal) Book
  - Sales Return (Journal) Book
  - Journal Proper
  - Control Accounts
- > Financial Statements
  - Trading and Pro"t & Loss Account
  - Trading Account
  - Profit & Loss Account
  - Balance Sheet
  - Types of Assets and Liabilities included in a Balance Sheet
- ➤ Key Takeaways
- > Practice Exercises

### **Chapter 2: Maintaining Chart of Accounts – 4 hours**

- > Introduction
  - Getting Started with Tally.ERP 9
  - Mouse/Keyboard Conventions
- Company Creation
  - Shut a Company
  - Select a Company
  - Alter Company Details
- Company Features and Configurations
  - F11: Company Features
  - F12: Configuration
- > Chart of Accounts
  - Ledger & Group
    - Ledger Creation
      - Single Ledger Creation
      - Multi Ledger Creation
      - Altering and Displaying Ledgers
    - Group Creation
      - Single Group Creation
      - Multiple Group Creation
    - Displaying Groups and Ledgers

- Displaying Groups
- Display of Ledgers
- Deletion of Groups and Ledgers

### Chapter 3: Recording Day-to-Day Transactions – 10 hours

- > Introduction
- **>** Business Transactions
  - Source Document for Voucher
  - Recording Transactions in Tally.ERP 9
- > Accounting Vouchers
  - Receipt Voucher (F6)
  - Contra Voucher (F4)
  - Payment Voucher (F5)
  - Purchase Voucher (F9)
  - Sales Voucher (F8)
  - Debit Note Voucher
  - Credit Note (Ctrl+F8)
  - Journal Voucher (F7)

### Chapter 4: Accounts Receivable and Payable Management – 10 hours

- > Introduction
  - Accounts Payable and Receivables
- ➤ Maintaining Bill-wise Details
- > Activation of Maintain Bill-wise Details Feature
- ➤ New Reference
- > Against Reference
- > Advance
- ➤ On Account
- > Stock Category Report
- > Changing the Financial Year in Tally.ERP 9

### **Chapter 5: MIS Reports – 5 hours**

- > Introduction
- ➤ Advantages of Management Information Systems
- ➤ MIS Reports in Tally.ERP 9
  - Trial Balance
  - Balance Sheet
  - Profit and Loss Account
  - Cash Flow Statement
  - Ratio Analysis
  - Books and Reports
  - Day Book
    - Receipts and Payments
    - Purchase Register
    - Sales Register
    - Bills Receivable and Bills Payable

# **Course Title: TALLY PRO (CCO5)**

### **Overview:**

This advanced level certification from Tally is for candidates aspiring for growth in their careers. Candidates passing the online assessment will earn a verifiable digital certificate from Tally. Tally PRO will help certified candidate take a significant shift in the career and prepares to Handle mid-level positions in an organization.

### **Objective:**

This course is designed to impart knowledge regarding concepts of Financial Accounting Tally is an accounting package which is used for learning to maintain accounts. As this course is useful for Commerce students to get placements in different offices as well as companies in Accounts departments.

#### **SYLLABUS**

# **Chapter 1: Journalizing and Posting of Transaction – 5 hours.**

- > Introduction
- > Trial Balance
  - Methods of Preparation
- ➤ Subsidiary Books & Control Accounts
  - Cash Book
    - Single Column Cash Book
    - Double Column Cash Book
    - Three Column Cash Book
  - Petty Cash Book
  - Purchase Book
  - Purchase Return Book
  - Sales Book
  - Sales Return Book
  - Journal Proper
  - Control Accounts
- > Financial Statements
  - Trading and Profit & Loss Account
    - Trading Account
    - Profit & Loss Account
  - Balance Sheet
    - Types of Assets and Liabilities included in Balance Sheet

#### Chapter 2: Accounts Receivable and Payable Management – 5 hours

- > Introduction
- Accounts Payable and Receivable
- ➤ Maintaining Bill-wise Details
- > Activation of Maintaining Bill-wise Details Feature
- ➤ New Reference
- ➤ Against Reference
- > Advance Reference
- On Account
- Credit Limit

- Activate Credit Limit
- Setting Credit Limits
- Exceeding Credit Limits
- Exception to Credit Limits
- ➤ Payment Performance of Debtors
- Changing the Financial Year in Tally. ERP 9

### Chapter 3: Banking – 5 hours

- > Introduction
- **▶** Banking Payments
- > Setting up Banking Features
- ➤ Cheque Management
  - Cheque Printing
    - Single Cheque Printing
    - Multi Cheque Printing
  - Cheque Register
    - Cancelled Cheque
    - Blank Cheque
- ➤ Bank Reconciliation
  - Manual Bank Reconciliation
  - Auto Bank Reconciliation
- Deposit Slip
  - Cash Deposit Slip
  - Cheque Deposit Slip
- Payment Advice
- ➤ Managing of Post-dated Cheques
- ➤ Notional Bank
- ➤ Post-dated Report
- ➤ Handling e-Payments in Tally. ERP 9
  - e-Payments Report
  - Exporting e-Payment Transactions from e-Payments Report
  - Sending Payment Instructions to Bank
- ➤ Updating the Bank Details Instantly in Tally. ERP 9

#### Chapter 4: Allocation and Tracking of Expenses and Incomes – 5 hours

- > Introduction
- ➤ Cost Centre and Cost Categories
  - Activation of Cost Category and Cost Centre
  - Allocation of Expenses and Incomes using Cost Centre
  - Allocation of Expenses and Incomes using Cost Centre with Cost category
    - Allocation of expenses to multiple cost centers and cost categories
- ➤ Automation of Cost Centre and Cost Categories while recording transactions
  - Cost Centre Classes
- Cost Centre Reports
  - Category Summary
  - Cost Centre Break-up
  - Ledger Break-up

### Group Break-up

### **Chapter 5: MIS Reports – 5 hours**

- > Introduction
- > Advantages of Management Information Systems
- > Types of MIS Reports in Tally. ERP 9
- ➤ MIS Reports in Tally. ERP 9
  - Trial Balance
  - Balance Sheet
  - Profit and Loss Account
  - Cash Flow Statement
  - Funds Flow Statement
  - Ratio Analysis
  - Books and Accounting Reports
    - Day Book
    - Receipts and Payments
    - Purchase Register
    - Sales Register
    - Bills Receivable and Bills Payable
  - Inventory Reports
    - Stock Summary
    - Stock Transfer
    - Movement Analysis
    - Ageing Analysis

### Chapter 6 Goods and Services Tax – 5 hours

- > Introduction to GST
- > Getting Started with GST (Goods)
- ➤ Advance adjustments and Entries (Goods)
- ➤ Getting Started with GST (Services)
- ➤ Advance adjustments and Entries (Services)

### Chapter 7 Tax Deducted at Source (TDS) – 5 hours

- > Introduction
- ➤ Basic Concepts of TDS
- > TDS Process
- > TDS in Tally. ERP 9
- > Activation of TDS Feature in Tally. ERP 9
- > TDS Statutory Masters
- ➤ Configuring TDS at Group Level
- ➤ Configuring TDS at Ledger Level
- ➤ Booking of Expenses in Purchase Voucher
- ➤ Recording Transactions
  - Expenses Partly Subject to TDS
  - Booking Expenses and Deducting TDS Later
  - Accounting Multiple Expenses and Deducting TDS Later
  - Accounting for TDS on Advance Payments against Transport

- TDS on Expenses at Lower Rate
- TDS on Expenses at Zero Rate
- Deducting TDS on Payments
- Reversal of Expenses with TDS
- Deducting TDS on Expenses with Inventory
- Accounting TDS on Fixed Assets
- Payment of TDS
- > TDS Reports
  - Challan Reconciliation
  - TDS Outstanding
  - E-Return

# **DIGITAL MARKETING (CCO6)**

Today, no marketing plan or strategy is complete without digital strategy. Almost all industries have been using digital marketing to build brand, generate leads or sell. As the world is getting more and more digitized in every respect, Digital Marketing is a booming career option today. With striking features like cost-effectiveness, instant response, flexibility, convenience, effectiveness, Digital Marketing is making a strong impact in the world of Marketing and Advertising. This course helps the companies to Increase brand awareness, drive sales and/or leads

### **Course Objectives**

- Understand the conceptual framework of Digital Marketing
- Understand How Customers behave in digital space
- Understand the concepts of Value Creation, delivery and communication in digital space
- Legal and Ethical Issues in Internet Marketing
- Understand the workings of paid advertisement and search engine optimized advertisements on popular search engine.
- Understand how to use web analytics and the concept of ROI in Digital space
- Understand the usage of Social Media

### Scope AND Course Duration: 40 Hrs,

### **Training Process**

- Theory
- Practical
- Assignment
- Case study
- Evaluation

### **SYLLABUS**

#### **Content:**

- Digital Marketing vs. Traditional Marketing
- Affiliate Marketing
- Analytics Marketing
- Blog Marketing
- Content Marketing
- Email Marketing
- Inbound Marketing
- Mobile Marketing
- Search Engine Marketing (SEM)
- Search Engine Optimization (SEO)
- Social Media Marketing (SMM)
- Social Media Optimization (SMO)
- Email Marketing
- Internet Marketer
- Mobile Marketing

# **Mathematics for Management (CCO7)**

# **Objectives:**

- To give knowledge of arithmetic to the management students.
- To develop interest towards math.
- To develop logical and problem-solving ability in the management students.
- Emotional development of management students.

#### **SYLLABUS**

### Unit 1- Algebra

- > Variables
- ➤ Function of One Variable
- > Functions of More than One Variable
- ➤ Linear Equations: One Variable
- ➤ The Cartesian Plane
- > Straight Lines
- > Finding Solutions: Two Equations
- ➤ Linear Inequalities: One Variable
- ➤ Linear Inequalities: Two Variables
- ➤ Polynomials and Quadratic Functions
- Powers and Exponents
  - Power Function
  - Cobb-Douglas Function
  - Exercises
- Order of Operations
- > Entering Formulas and Graphing Functions in Excel
- ➤ Inverse Functions
- > Ratios and Percentages
- > Elasticity of Demand
- ➤ Logarithms
- ➤ Index Numbers

#### **Unit 2- Calculus**

- ➤ Motivation for Differential Calculus
- > Determining the Slope of a Function
- ➤ Slope and Tangent Line
- > Rules for Computing Derivatives
- > Second Derivatives, Convex, and Concave Functions
- ➤ Maximizing and Minimizing Functions
- > Inflection Points

### **Unit 3- Statistics**

- > Summation Notation
- ➤ Using Bar Graphs and Histograms to Summarize Data
- > Measures of Central Tendency
- > Skewness and Measures of Central Tendency
- ➤ Measures of Variability
- > The Rule of Thumb and Outliers
- > Covariance and Correlation

### **Unit 4 - Probability**

- > Experiments, Sample Spaces, and Events
- ➤ Basic Probability Calculations Involving Sample Spaces
- ➤ Mutually Exclusive Events
- ➤ Complementary Events
- Conditional Probability
- ➤ Independent Events
- Random Variables
- > Continuous Random Variables
- ➤ Normal Random Variable

#### **Unit 5- Finance**

- ➤ Net Present Value (NPV)
- ➤ Internal Rate of Return (IRR)
- > Payback Criteria
- > Future Value
- > Annuities
- Perpetuities
  - Growing Perpetuity
- > Compound Interest

# **Certificate Course Details:**

Faculty:	Commerce and Management
Sub Faculty:	Management
Course Code:	CC08
Title of Course	Basics of Stock Market
Course Credits:	2
Additional Course Teaching Hours:	30
Tutorial /Evaluation Pattern	50:50 (P:T)
Course Co-ordinator:	Dr. Vikas Barbate
Mobile No.:	9850286769
Email Id:	vikasbarbate@asmedu.org

**Content of Proposed Course: (Outline)** 

Module I: Introduction to Stock Market Module II: Stock Market Operations Module III: Stock Market Indices

Module IV: Fundamental Analysis and Technical Analysis

Module V: Risk Management and Diversification

### **Justification of Course:**

This course provides a comprehensive foundation for students aiming to understand the intricacies of financial markets and stock trading. Covering topics such as the meaning and types of financial markets, the participants involved, and the functions they serve, the course ensures that students can understand the fundamentals of the financial market. The focus on stock markets, their importance, and the key participants, equips students with practical insights into market operations, including buying and selling stocks, market and limit orders, and the settlement process. The exploration of stock market indices and the role they play enhances students' ability to gauge market performance. Furthermore, the inclusion of fundamental and technical analysis, along with risk management and diversification strategies, empowers students with the tools needed to make informed investment decisions. The course, with its holistic approach, prepares students to navigate the complexities of the stock market, fostering financial literacy and critical thinking skills crucial for success in the dynamic world of finance.

### **Course Outcomes (CO's)**

- The students will be able to understand the different concepts related to financial markets.
- The students will demonstrate proficiency in buying and selling stocks, understanding market orders, limit orders, bid and ask prices, and the settlement process.
- The students will be able to apply fundamental and technical analysis techniques to evaluate stocks and make informed investment decisions.

Module Number	Contents	No. of Sessions (T+P)
I	Introduction to Stock Market	
	Financial Markets – Meaning and Definition	
	Types of Financial Markets	
	Participants in Financial Markets	3+3 Hours
	Financial Instruments	
	Functions of Financial Markets	

Module Number	Contents	No. of Sessions (T+P)
TVUIIDEI	Stock – Meaning and Types	(1.1)
	Stock Market – Meaning	
	Importance of the Stock Market	
	Stock Symbols and Tickers	
	Key Participants: Investors, Brokers, Exchanges	
	Prominent Stock Exchanges	
II	Stock Market Operations	
	Buying and Selling Stocks	
	Market Orders	
	o Definition and Purpose	
	o Immediate Execution	
	<ul> <li>Price Impact and Volatility</li> </ul>	
	Limit Orders	
	o Definition and Purpose	
	o Price Control and Execution Guarantee	
	o Types of Limit Orders (Buy Limit vs. Sell Limit)	
	Bid and Ask Prices	
	Settlement Process - Definition and Purpose	
	• T+2 Settlement Cycle:	
	o Explanation of T+2 (Transaction Date plus 2	2.2.11
	Days)	3+3 Hours
	o Role in Clearing and Settlement	
	Market Practices and Variations	
	Clearing Houses:	
	<ul> <li>Definition and Functions</li> </ul>	
	o Risk Management	
	o Role in Ensuring Trade Settlement	
	Role of Brokers and Depositories:	
	o Broker's Involvement in Settlement	
	o Depository Participants (DPs)	
	o Dematerialization and Electronic Settlement	
	Challenges and Risks in Settlement:	
	o Settlement Failures	
	o Counterparty Risks	

Module Number	Contents	No. of Sessions (T+P)
	Regulatory Measures for Mitigation	
III	Stock Market Indices	
	Introduction to Stock Indices	
	Major Stock Indices: S&P 500, Dow Jones Industrial	3+3 Hours
	Average, NASDAQ Composite	o o mans
	Role and Significance of Indices	
IV	Fundamental Analysis and Technical Analysis	
	Fundamental Analysis	
	<ul> <li>Basics of Fundamental Analysis</li> </ul>	
	o Financial Statements: Income Statement, Balance	
	Sheet, Cash Flow Statement	
	o Financial Ratios: P/E Ratio, EPS, ROE	2+2 11
	Technical Analysis	3+3 Hours
	<ul> <li>Basics of Technical Analysis</li> </ul>	
	<ul> <li>Stock Charts and Patterns</li> </ul>	
	o Common Technical Indicators: Moving	
	Averages, RSI, MACD	
V	Risk Management and Diversification	
	Risk in the Stock Market - Overview	
	Types of Risks	
	Factors Influencing Risk	
	Measuring Risk	3+3 Hours
	Importance of Diversification:	3 13 110u18
	Risk Reduction through Portfolio Diversification	
	Diversification Strategies	
	Risk-Return Tradeoff	

### A) Textbooks:

- 1. Bodie, Z., Kane, A., & Marcus, A. J. (2018). Investments. McGraw-Hill Education.
- 2. Graham, B., & Dodd, D. L. (2009). Security Analysis. McGraw-Hill Education.
- 3. Siegel, J. J. (2014). Stocks for the Long Run. McGraw-Hill Education.
- 4. Fisher, P. (2003). Common Stocks and Uncommon Profits. Wiley.

### B) Reference Books:

- 1) Graham, B. (2006). The Intelligent Investor. HarperBusiness.
- 2) Lynch, P., & Rothchild, J. (2000). One Up On Wall Street. Simon & Schuster.
- 3) Schwager, J. D. (2012). Market Wizards. Harper Business.

- 4) Bogle, J. C. (2017). Common Sense on Mutual Funds. Wiley.
- 5) Lefèvre, E. (1994). Reminiscences of a Stock Operator. Wiley.
- C) E- resources- https://finance.yahoo.com/

# **Certificate Course Details:**

Faculty:	Commerce and Management
Sub Faculty:	Management
Course Code:	CC09
Title of Course	E-Commerce Strategies for Managers
Course Credits:	2
Additional Course Teaching Hours:	30
Tutorial /Evaluation Pattern	50:50 (P:T)
Course Co-ordinator:	Dr. Lalit Kanore
Mobile No.:	9271880459
Email	Lalit.kanore@asmedu.org

### **Content of Proposed Course: (Outline)**

**Module I: Introduction to E-Commerce Module II: E-Commerce Infrastructure** 

**Module III: E-Commerce Marketing Strategies** 

Module IV: E-Commerce Logistics and Supply Chain Management Module V: E-Commerce Analytics and Data-driven Decision Making

#### Justification of Course:

The proposed course on E-Commerce offers a comprehensive exploration of the dynamic landscape of digital business, equipping students with a profound understanding of the key facets shaping the online marketplace. This course introduces students to the fundamental concepts of E-Commerce, elucidating its meaning, evolution, and diverse types, including B2B, B2C, and emerging models. This course delves into the intricate infrastructure underpinning E-Commerce, covering the Internet, mobile platforms, and security protocols, alongside practical skills in website development and payment gateways. The course immerses students in E-Commerce marketing strategies, elucidating their meaning, features, and significance, while also delving into the intricacies of customer behaviour and cutting-edge trends such as voice and visual search and AI applications. This course focuses on the critical aspects of E-Commerce logistics and supply chain management, addressing order fulfilment, inventory management, last-mile delivery challenges, and sustainability. Lastly, the course underscores the pivotal role of analytics and data-driven decision-making in E-Commerce, covering KPIs, customer analytics, and innovative practices like A/B testing and CRO. This course not only provides theoretical knowledge but also emphasizes practical skills, ensuring that students are well-prepared to navigate and excel in the evolving world of E-Commerce.

#### Course Outcomes (CO's)

- Students will gain a thorough understanding of the meaning and definition of E-commerce, including its historical evolution.
- Students will be able to classify and differentiate various types of E-commerce models, such as B2B, B2C, C2C, C2B, B2G, G2B, and G2C.
- Students will demonstrate practical skills in E-commerce website development, payment gateways, and security measures.
- Students will acquire practical skills in website optimization, search engine optimization (SEO), pay-per-click (PPC) advertising, social media marketing, and email marketing.

Module Number	Contents	No. of Sessions (T+P)
I	Introduction to E-Commerce:	
	E-Commerce – Meaning and Definition	3+3 Hours
	Evolution of E-Commerce	

Module Number	Contents	No. of Sessions (T+P)
	• Types of E-Commerce: B2B, B2C, C2C, C2B, B2G,	
	G2B, G2C.	
II	E-Commerce Infrastructure:	
	• Internet, World Wide Web (WWW), Mobile Platforms,	
	E-commerce Websites, Payment Gateways, Security	
	Protocols (HTTPS), Content Delivery Networks (CDNs),	3+3 Hours
	Mobile Applications.	5 · 5 · 110u13
	E-Commerce Website Development.	
	Payment Gateways and Security.	
III	E-Commerce Marketing Strategies:	
	E-commerce Marketing	
	<ul> <li>Meaning and Definition</li> </ul>	
	o Features	
	o Significance	
	Customer Understanding in E-commerce:	
	o E-commerce Buyer Behaviour	
	<ul> <li>Customer Segmentation and Targeting</li> </ul>	
	<ul> <li>Customer Journey Mapping</li> </ul>	
	Website Optimization for E-commerce	3+3 Hours
	Search Engine Optimization (SEO) for E-commerce	o · o iiouis
	Pay-Per-Click (PPC) Advertising	
	Social Media Marketing	
	Email Marketing Strategies	
	Emerging Trends in E-commerce Marketing	
	<ul> <li>Voice and Visual Search</li> </ul>	
	o Augmented Reality (AR)	
	<ul> <li>Virtual Reality (VR)</li> </ul>	
	o Artificial Intelligence (AI) Applications.	
IV	E-Commerce Logistics and Supply Chain Management:	
	Order Fulfilment and Logistics Strategies	2   2 11
	Inventory Management in E-Commerce	3+3 Hours
	Last-Mile Delivery Challenges and Solutions	

Module Number	Contents	No. of Sessions (T+P)
	Sustainability in E-Commerce Logistics	
V	E-Commerce Analytics and Data-driven Decision Making:	
	Importance of Analytics in E-Commerce	
	Key Performance Indicators (KPIs) for E-Commerce	3+3 Hours
	Customer Analytics and Personalization	
	A/B Testing and Conversion Rate Optimization (CRO)	

### A) Textbooks:

- 1. "E-commerce 2022" by Kenneth C. Laudon and Carol Guercio Traver
- 2. "E-commerce: Business, Technology, Society" by Kenneth C. Laudon and Carol Guercio Traver
- 3. "E-commerce 2020: Business, Technology, Society" by Kenneth C. Laudon and Carol Guercio Traver

### **B) Reference Books:**

- 1) "E-commerce Essentials" by Kenneth C. Laudon and Carol Guercio Traver
- 2) "E-commerce Get It Right!: Essential Step by Step Guide for Selling & Marketing Products Online" by Ian Daniel
- 3) "E-commerce For Dummies" by Don Jones and Mark D. Scott
- C) E- resources- http://ecommerce.internet.com/resources/library/paysolutions

# **Certificate Course Details:**

Faculty:	Commerce and Management
Sub Faculty:	Management
Course Code:	CC10
Title of Course	Effective Decision Making Techniques`
Course Credits:	2
Additional Course Teaching Hours:	30
Tutorial /Evaluation Pattern	50:50 (P:T)
Course Co-ordinator:	Mrs. Jyoti Gawhane
Mobile No.:	9011018127
Email Id:	jyotigawhane@asmedu.org

### **Content of Proposed Course: (Outline)**

Module I: Introduction to Decision Making Module II: Decision Analysis Techniques Module III: Strategic Decision Making Module IV: Behavioral Decision Making Module V: Ethical Decision Making

### **Justification of Course:**

The course on "Effective Decision-Making Techniques" is designed to equip students with the knowledge and skills necessary to make sound decisions in various personal and professional contexts. Decision-making is a critical aspect of leadership and management, and this course provides a comprehensive overview of decision-making models, analysis techniques, and behavioral factors that influence decision outcomes. By exploring topics such as decision analysis, strategic decision-making, behavioral biases, and ethical considerations, students will gain insights into the complexities of decision-making processes and learn practical strategies for making informed and effective decisions. Through hands-on exercises, case studies, and discussions, participants will develop the analytical, critical thinking, and ethical reasoning skills needed to navigate decision-making challenges and contribute to organizational success. This course is essential for anyone seeking to enhance their decision-making capabilities and become more effective leaders and managers in today's dynamic and uncertain environments.

### **Course Outcomes (CO's)**

- Students will have a thorough understanding of various decision making models.
- Students will be proficient in applying decision analysis techniques such as decision trees, multi-criteria decision analysis (MCDA), sensitivity analysis, and risk assessment.
- Students will develop the ability to recognize and mitigate cognitive biases.

Module Number	Contents	No. of Sessions (T+P)
I	<ul> <li>Introduction to Decision Making</li> <li>Understanding the importance of effective decision-making in personal and professional contexts.</li> <li>Overview of decision-making models and frameworks, including rational decision-making, bounded rationality, and intuitive decision-making.</li> <li>Factors influencing decision-making, such as cognitive biases, emotions, and heuristics.</li> <li>Case studies and examples illustrating the consequences of poor decision-making and the benefits of effective decision-making.</li> </ul>	3+3 Hours
II	Decision Analysis Techniques	3+3 Hours

Module Number	Contents	No. of Sessions (T+P)
	<ul> <li>Introduction to decision analysis and its application in structured decision-making processes.</li> <li>Decision trees: construction, analysis, and interpretation for evaluating complex decisions under uncertainty.</li> <li>Multi-criteria decision analysis (MCDA): techniques for evaluating and comparing alternatives based on multiple criteria or objectives.</li> <li>Sensitivity analysis and risk assessment: methods for assessing the impact of uncertainty and variability on decision outcomes.</li> <li>Hands-on exercises and case studies to apply decision</li> </ul>	
III	analysis techniques to real-world decision problems.  Strategic Decision Making	
	<ul> <li>Strategic decision-making process: formulation, implementation, and evaluation of strategic decisions.</li> <li>SWOT analysis: assessing strengths, weaknesses, opportunities, and threats to inform strategic decision-making.</li> <li>Scenario planning: anticipating and preparing for future uncertainties by exploring alternative scenarios and strategies.</li> <li>Game theory: principles and applications for analyzing strategic interactions and decision-making in competitive environments.</li> <li>Group decision-making: techniques for facilitating group discussions, reaching consensus, and managing decision-making dynamics.</li> </ul>	3+3 Hours
IV	Behavioral Decision Making	
	<ul> <li>Understanding the role of psychology and behavioral economics in decision-making processes.</li> <li>Cognitive biases and heuristics: common biases affecting decision-making and strategies for mitigating their impact.</li> <li>Prospect theory: principles of decision-making under risk and uncertainty, including loss aversion and reference dependence.</li> <li>Emotions and decision-making: the influence of emotions on decision preferences, risk perception, and judgment.</li> <li>Decision-making traps and pitfalls: recognizing and avoiding common mistakes in decision-making.</li> </ul>	3+3 Hours
V	Ethical Decision Making	
	<ul> <li>Ethical decision-making frameworks: principles of ethical reasoning and decision-making in professional contexts.</li> <li>Ethical dilemmas: identifying and analyzing ethical dilemmas in decision-making situations.</li> <li>Stakeholder analysis: considering the interests and perspectives of various stakeholders in decision-making processes.</li> <li>Corporate social responsibility (CSR): integrating ethical considerations and social values into decision-making practices.</li> <li>Case studies and role-playing exercises to explore ethical decision-making challenges and practice ethical reasoning skills.</li> </ul>	3+3 Hours

# A) Textbooks:

- 1. Hammond, J. S., Keeney, R. L., & Raiffa, H. (2015). Smart Choices: A Practical Guide to Making Better Decisions. Harvard Business Review Press.
- 2. Goodwin, P., & Wright, G. (2014). Decision Analysis for Management Judgment. John Wiley & Sons.
- 3. Luce, R. D., & Raiffa, H. (1989). Games and Decisions: Introduction and Critical Survey. Dover Publications.

### **B) Reference Books:**

- 1) Kahneman, D. (2011). Thinking, Fast and Slow. Farrar, Straus and Giroux.
- 2) Schwartz, B. (2005). The Paradox of Choice: Why More is Less. Harper Perennial.
- 3) Tversky, A., & Kahneman, D. (Eds.). (2013). Rational Choice and the Structure of the Environment. Princeton University Press.

### C) E- resources

- 1. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2752586/
- 2. <a href="https://www.behavioraleconomics.com/">https://www.behavioraleconomics.com/</a>

# **Certificate Course Details:**

Faculty:	Commerce and Management
Sub Faculty:	Management
Course Code:	CC11
Title of Course	Effective Leadership Skills
<b>Course Credits</b>	2
Additional Course Teaching Hours:	30
Evaluation (in hours)	3 Hours
Course Co-ordinator:	Dr. Sudhakar J. Bokephode
Mobile No.:	9404683452
Email Id:	drsudhakar@asmedu.org

### **Content of Proposed Course: (Outline)**

**Chapter 1: Effective Leadership Skills Information** 

**Chapter 2: Characteristics of Effective Leadership Skills** 

**Chapter 3: Types of Effective Leadership** 

Chapter 4: 6 P's, 4 C's and 7 E's of Effective Leadership Skills

Chapter 5: Justification and Conclusion of Effective Leadership Skills

### **Justification of Course:**

Leaders have a profound impact on their overall work environment. Effective leaders create an atmosphere of trust and respect, which in turn fosters creativity and collaboration. Employee morale is also higher in workplaces with strong management, leading to stronger workplace relationships.

### **Course Outcomes (CO's)**

• Good leaders are able to create a positive work environment, motivate their employees, and provide clear direction and guidance. This can lead to increased efficiency and productivity, a more engaged and committed workforce is a high-performing one

Unit Number	Contents	No. of Sessions (L+P)
I	<ul> <li>Effective Leadership Skills Information</li> <li>Introduction of Effective Leadership skills</li> <li>Objectives of Effective Leadership Skills</li> <li>Main Benefits of Effective Leadership Skills</li> </ul>	2+2=4hrs.
II	Characteristics of Effective Leadership Skills	3+3=6 hours
III	Types of Effective Leadership  Transactional Leadership Servant Leadership	3+3=6 hours

	Charismatic Leadership	
IV	<ul> <li>6 P's, 4 C's and 7 E's of Effective Leadership Skills</li> <li>Purpose, People, Passion, Progress, Product, Profit</li> <li>Competence, Candour, Connect, Character</li> <li>Engage, Educate, Equip, Encourage, Empower, Energize, Elevate</li> </ul>	4+4=8hrs.
V	Justification and Conclusion of Effective Leadership Skills  • Enhanced Team Performance  • Improved Employee Satisfaction  • Increased Innovation and Creativity  • Effective Decision-Making  • Adaptation to Change  • Positive Organizational Culture  • Effective Communication and Collaboration  • Talent Retention and Development  • Ethical Decision-Making and Trust  • Strategic Alignment and Goal Achievement  • Resilience and Crisis Management  • Continuous Learning and Innovation	3+3=6 hours

### A) Textbooks:

- 1. Leaders Eat Last
- 2. The 21 Irrefutable Laws of Leadership
- 3. Dare to Lead
- 4. The Mentor Leader
- 5. How to Lead
- 6. Leadership: Theory and Practice
- 7. The 7 Habits of Highly Effective People
- 8. Primal Leadership

### **B) Reference Books:**

- 1) The 7 Habits of Highly Effective People
- C) E- resources- https://www.forbes.com/sites/glennllopis/2013/08/05/successful-leadership

# **Certificate Course Details:**

Faculty:	Commerce and Management
Sub Faculty:	Management
Course Code:	CC12
Title of Course	Financial Analysis of Stock Market
Course Credits:	2
Additional Course Teaching Hours:	30
Tutorial /Evaluation Pattern	50:50 (P:T)
Course Co-ordinator:	Dr. Lalit Kanore
Mobile No.:	9271880459
Email Id:	Lalit.kanore@asmedu.org

### **Content of Proposed Course: (Outline)**

**Module I: Introduction to Financial Analysis** 

Module II: Fundamental Analysis Module III: Technical Analysis Module IV: Valuation Methods Module V: Portfolio Creation

### **Justification of Course:**

This course, "Introduction to Financial Analysis," offers a comprehensive and practical exploration of key concepts essential for understanding and navigating the complex landscape of stock markets. By providing an overview of financial analysis and emphasizing its importance in stock markets, the course establishes a foundational understanding of analytical techniques crucial for informed decision-making. Covering both fundamental and technical analysis, students delve into the basics of assessing economic and industry conditions, conducting qualitative and quantitative company analyses, and interpreting financial ratios like P/E Ratio, EPS, and ROE. The inclusion of real-world case studies facilitates practical application, enhancing critical thinking and analytical skills. Furthermore, the course equips students with valuable tools for stock valuation, including Discounted Cash Flow (DCF) Analysis, Dividend Discount Model (DDM), Comparable Company Analysis (CCA), and Precedent Transactions Analysis (PTA). The focus on portfolio creation ensures that students gain hands-on experience, preparing them to navigate the dynamic challenges of stock markets with a robust analytical skill set.

### **Course Outcomes (CO's)**

- The students will be able to understand the different concepts related to financial markets analysis.
- The students will be able to demonstrate proficiency in using a variety of financial ratios and metrics as tools for analysis.
- Utilize fundamental analysis and trend analysis in making informed investment decisions.

Module Number	Contents	No. of Sessions (T+P)
I	Introduction to Financial Analysis	
	Overview of Financial Analysis	
	Importance of Financial Analysis in Stock Markets	3+3 Hours
	Ratios and Metrics in Financial Analysis	
II	Fundamental Analysis	3+3 Hours

Module Number	Contents	No. of Sessions (T+P)
	Basics of Fundamental Analysis	
	Economic and Industry Analysis	
	Company Analysis: Qualitative and Quantitative Factors	
	Financial Ratios: P/E Ratio, EPS, ROE	
	Case Studies in Fundamental Analysis	
III	Technical Analysis	
	Basics of Technical Analysis	
	Stock Charts and Patterns	
	Common Technical Indicators: Moving Averages, RSI,	3+3 Hours
	MACD	
	Trend Analysis and Support/Resistance	
	Application of Technical Analysis in Stock Markets	
IV	Valuation Methods	
	Discounted Cash Flow (DCF) Analysis	
	Dividend Discount Model (DDM)	
	Comparable Company Analysis (CCA)	3+3 Hours
	Precedent Transactions Analysis (PTA)	
	Real-world Valuation Exercises	
V	Portfolio Creation	
	Portfolio – Meaning	
	Portfolio Diversification	
	Building Financial Models for Stock Valuation	3+3 Hours
	<ul><li>Forecasting Financial Statements</li><li>Sensitivity Analysis and Scenario Planning</li></ul>	

#### A) Textbooks:

- 1. Palepu, K. G., Healy, P. M., & Peek, E. (2013). Business Analysis and Valuation: Using Financial Statements. Cengage Learning.
- 2. Penman, S. H. (2012). Financial Statement Analysis and Security Valuation. McGraw-Hill Education.
- 3. Damodaran, A. (2012). Investment Valuation: Tools and Techniques for Determining the Value of Any Asset. John Wiley & Sons.
- 4. Graham, B., Dodd, D. L., & Cottle, S. (2009). Security Analysis: Principles and Technique. McGraw-Hill Education.
- 5. Fridson, M. S., & Alvarez, F. (2011). Financial Statement Analysis: A Practitioner's Guide. John Wiley & Sons.

### **B) Reference Books:**

- 1) Brealey, R. A., Myers, S. C., & Allen, F. (2017). Principles of Corporate Finance. McGraw-Hill Education.
- 2) Damodaran, A. (2008). Applied Corporate Finance: A User's Manual. John Wiley & Sons.

C) E- resources- https://www.morningstar.com/

# **Certificate Course Details:**

Faculty:	Commerce and Management
Sub Faculty:	Management
Course Code:	CC15
Title of Course	Data Analytics for Managers
Course Credits:	2
Additional Course Teaching Hours:	30
Tutorial /Evaluation Pattern	50:50 (P:T)
Course Co-ordinator:	Mr. Vishal Patil
Mobile No.:	9096297523
Email Id:	vishalpatil@asmedu.org

**Content of Proposed Course: (Outline)** 

**Module I: Introduction to Data Analytics Module II: Data Collection and Preprocessing** 

**Module III: Data Analysis Techniques** 

Module IV: Data Visualization and Interpretation

Module V: Ethical and Legal Considerations in Data Analytics

### **Justification of Course:**

The course "Data Analytics for Managers" is designed to equip students with essential skills and knowledge in leveraging data analytics for effective managerial decision-making. In today's data-driven business landscape, managers must understand how to collect, preprocess, analyze, and interpret data to gain valuable insights and drive strategic initiatives. The course begins with an introduction to data analytics concepts, followed by a deep dive into data collection and preprocessing techniques. Students will learn various data analysis techniques, including statistical analysis, machine learning algorithms, and time series forecasting, and gain practical experience through hands-on exercises. Additionally, the course covers data visualization principles and tools for creating informative visualizations to communicate insights effectively. Furthermore, students will explore ethical and legal considerations in data analytics to ensure responsible use of data. By the end of the course, students will be equipped with the skills and knowledge needed to harness the power of data analytics to make informed decisions and drive organizational success in today's data-driven business environment.

# **Course Outcomes (CO's)**

- Students will demonstrate a comprehensive understanding of the fundamental principles and concepts of data analytics.
- Students will be proficient in applying a variety of data analysis techniques, including statistical analysis methods, machine learning algorithms, and time series analysis.
- Students will develop the ability to create informative and visually appealing data visualizations using a range of tools and software.
- Students will be aware of the ethical and legal considerations associated with data analytics.

Module	Contents	No. of Sessions
Number		(T+P)
I	Introduction to Data Analytics	
	Overview of data analytics and its importance in managerial decision-making	
	<ul> <li>Types of data analytics: descriptive, diagnostic, predictive, and prescriptive analytics</li> </ul>	3+3 Hours
	<ul> <li>Introduction to key concepts and terminology: big data, data mining, machine learning, and artificial intelligence</li> </ul>	

Module Number	Contents	No. of Sessions (T+P)
	Case studies illustrating the application of data analytics in	
	different industries	
	Hands-on exercises using data analytics tools and software	
II	Data Collection and Preprocessing	
	<ul> <li>Methods for collecting and accessing data: surveys,</li> </ul>	
	interviews, observation, and web scraping	
	Data preprocessing techniques: data cleaning, transformation,	
	integration, and reduction	3+3 Hours
	Dealing with missing data, outliers, and inconsistencies  Fig. 1. (FDA):  (FDA):	
	Exploratory data analysis (EDA) techniques: summary      Activities data visualization and accordation analysis	
	statistics, data visualization, and correlation analysis	
	Practical exercises using real-world datasets to clean, preprocess, and analyze data	
III	Data Analysis Techniques	
	Statistical analysis methods: hypothesis testing, regression	
	analysis, and analysis of variance (ANOVA)	
	Machine learning algorithms: classification, clustering,	
	regression, and association rule mining	3+3 Hours
	Time series analysis and forecasting techniques	
	<ul> <li>Introduction to text analytics and sentiment analysis</li> </ul>	
	<ul> <li>Hands-on workshops to apply statistical and machine</li> </ul>	
	learning techniques to solve business problems	
IV	Data Visualization and Interpretation	
	<ul> <li>Principles of data visualization: effectiveness, clarity, and aesthetics</li> </ul>	
	<ul> <li>Types of data visualizations: charts, graphs, maps, and dashboards</li> </ul>	
	<ul> <li>Tools and software for creating visualizations: Tableau,</li> </ul>	3+3 Hours
	Power BI, R, and Python libraries (matplotlib, seaborn)	
	Best practices for designing and presenting data visualizations	
	Practical exercises to create informative and visually	
	appealing data visualizations	
V	Ethical and Legal Considerations in Data Analytics	
	Ethical issues in data analytics: privacy, confidentiality, bias,	
	and discrimination	
	<ul> <li>Regulatory frameworks and compliance requirements: GDPR, HIPAA, and CCPA</li> </ul>	
	Strategies for ensuring data security and protecting sensitive	3+3 Hours
	information	
	<ul> <li>Responsible use of data and decision-making: transparency, accountability, and fairness</li> </ul>	
	Case studies and group discussions on ethical dilemmas and real-world implications of data analytics	

### A) Textbooks:

- 1. Gupta, A., & Sharma, S. (2020). Business Analytics: Concepts, Methods, and Tools. Springer.
- 2. James, G., Witten, D., Hastie, T., & Tibshirani, R. (2013). An Introduction to Statistical Learning: with Applications in R. Springer.
- 3. Grolemund, G., & Wickham, H. (2017). R for Data Science: Import, Tidy, Transform, Visualize, and Model Data. O'Reilly Media.

# B) Reference Books:

- 1) Kelleher, J. D., Namee, B. M., & D'Arcy, A. (2015). Fundamentals of Machine Learning for Predictive Data Analytics: Algorithms, Worked Examples, and Case Studies. The MIT Press
- 2) Cairo, A. (2016). The Truthful Art: Data, Charts, and Maps for Communication. New Riders.
- 3) Baumer, B., Kaplan, T. D., & Horton, N. J. (2017). Modern Data Science with R. Chapman and Hall/CRC.

### C) E- resources

- 1. https://www.kaggle.com/
- 2. <a href="https://towardsdatascience.com/">https://towardsdatascience.com/</a>

# **Certificate Course Details:**

Faculty:	Commerce and Management
Sub Faculty:	Management
Course Code:	CC16
Title of Course	Microsoft Advanced Office Skills
Course Credits:	2
Additional Course Teaching Hours:	30
Tutorial /Evaluation Pattern	50:50 (P:T)
Course Co-ordinator:	Isha Bhate
Mobile No.:	8149673740
Email Id:	ishabhate@asmedu.org

### **Content of Proposed Course: (Outline)**

Module I: Advanced Microsoft Excel Skills Module II: Advanced Microsoft Word Skills

Module III: Advanced Microsoft PowerPoint Skills Module IV: Advanced Microsoft Outlook Skills Module V: Advanced Microsoft Access Skills

### **Justification of Course:**

The course on "Microsoft Advanced Office Skills" offers comprehensive training in leveraging the advanced features and functionalities of Microsoft Office applications to enhance productivity, efficiency, and effectiveness in various professional settings. In today's digital workplace, proficiency in advanced Office skills is essential for professionals to perform complex tasks, analyze data, create impactful presentations, and collaborate effectively. By covering advanced techniques in Excel for data analysis, Word for document management, PowerPoint for dynamic presentations, Outlook for email and calendar management, and Access for database manipulation, this course equips participants with the advanced competencies needed to excel in their roles and contribute to organizational success. Through hands-on exercises, practical assignments, and real-world case studies, participants will develop the expertise to tackle complex tasks, streamline workflows, and achieve optimal outcomes using Microsoft Office applications.

### **Course Outcomes (CO's)**

- Students will demonstrate proficiency in utilizing advanced features and functionalities of Microsoft Office applications.
- Students will develop the ability to analyze and manipulate data using advanced Excel functions
- Students will learn advanced email management techniques in Outlook.

Module	Contents	No. of Sessions
Number		(T+P)
I	<ul> <li>Advanced Microsoft Excel Skills</li> <li>Advanced functions and formulas: Lookup and reference functions, date and time functions, logical functions, and text functions.</li> <li>Data analysis tools: PivotTables, PivotCharts, data validation, and goal seek.</li> <li>Data visualization techniques: Conditional formatting, sparklines, and advanced charting options.</li> <li>Advanced data manipulation: Power Query for data transformation and Power Pivot for data modeling.</li> <li>Automation and macros: Creating and running macros to</li> </ul>	3+3 Hours
II	automate repetitive tasks.  Advanced Microsoft Word Skills	3+3 Hours

Module Number	Contents	No. of Sessions (T+P)
	Advanced formatting techniques: Styles and themes, sections	
	and page setup, and advanced paragraph formatting.	
	Managing long documents: Table of contents, footnotes and	
	endnotes, indexes, and cross-references.	
	Collaboration and review tools: Track changes, comments,	
	and comparing and combining documents.	
	Advanced document customization: Building blocks,	
	templates, and mail merge.	
	Accessibility and document security: Creating accessible	
	documents and protecting sensitive information.	
III	Advanced Microsoft PowerPoint Skills	
	Advanced slide design: Master slides, slide layouts, and	
	custom slide sizes.	
	Multimedia and animation: Inserting and editing multimedia	
	content (audio, video, and animations).	
	Interactivity and navigation: Hyperlinks, action buttons, and	3+3 Hours
	custom slide shows.	
	Advanced presentation delivery: Presenter view, rehearse	
	timings, and broadcasting presentations.	
	Integration with other Office applications: Embedding Excel	
	charts, Word documents, and Visio diagrams.	
IV	Advanced Microsoft Outlook Skills	
	Email organization and management: Rules and filters,	
	categories, and advanced search techniques.	
	Calendar and scheduling: Advanced calendar features,	
	scheduling assistant, and recurring appointments.	
	Contacts and tasks management: Contact groups, task	3+3 Hours
	delegation, and task assignments.	
	• Integration with other applications: Email merge with Word,	
	importing and exporting data, and sharing calendars.	
	Email security and privacy: Encrypting emails, digital	
	signatures, and managing junk email.	
V	Advanced Microsoft Access Skills	
	Database design principles: Normalization, relationships, and	
	referential integrity.	
	Advanced queries: Crosstab queries, parameter queries, and	
	action queries.	
	• Forms and reports customization: Tab controls, subforms,	3+3 Hours
	calculated controls, and grouping and sorting options.	J. J. Hours
	Data analysis and automation: Macros, VBA (Visual Basic	
	for Applications), and advanced data validation techniques.	
	Integration with other applications: Importing and exporting	
	data, linking to external data sources, and sharing data with Excel and Word.	

### A) Textbooks:

- 1. Gookin, D. (2019). Excel 2019 For Dummies. Wiley.
- 2. Murray, M. (2018). Microsoft Word 2019 Step by Step. Microsoft Press.
- 3. Kraynak, J. (2019). PowerPoint 2019 For Dummies. Wiley.

### **B) Reference Books:**

- 1) Kogan Page. (2019). The Ultimate Microsoft Office Book: Integrating Microsoft Office Applications for Better Business Outcomes. Kogan Page.
- 2) Boyce, P., & Cook, K. A. (2019). Access 2019 Bible. Wiley.

- C) E- resources
  1. <a href="https://support.microsoft.com/en-us/office">https://support.microsoft.com/en-us/office</a>
- 2. https://word.tips.net/