

SUB. CODE
23MSN13

COURSE NAME
INTELLECTUAL PROPERTY RIGHTS

L T P C
3 0 0 3

Course Objectives:

- To introduce fundamental aspects of intellectual property rights.
- To disseminate knowledge on patents copyrights in India and abroad.
- To disseminate knowledge on layout design protection and their registration aspects.
- To disseminate knowledge on trademarks and registration aspects
- To aware about current trends in IPR and Govt. steps in fostering IPR

UNIT-I INTRODUCTION TO INTELLECTUAL PROPERTY 9

Introduction - types of intellectual property - international organizations - agencies and treaties - importance of intellectual property rights.

UNIT-II TRADE MARKS 9

Purpose and function of trademarks - acquisition of trade mark rights - protectable matter - selecting - and evaluating trade mark - trade mark registration processes.

UNIT-III LAW OF COPY RIGHTS 9

Fundamental of copy right law - originality of material - rights of reproduction - rights to perform the work publicly - copy right ownership issues - copy right registration - notice of copy right - international copy right law.

UNIT-IV TRADE SECRETS 9

Trade secretes law - determination of trade secretes status - liability for misappropriations of trade secrets - and protection for submission - trade secretes litigation.

UNIT-V NEW DEVELOPMENT OF INTELLECTUAL PROPERTY 9

New developments in trade mark law - copy right law - patent law - intellectual property audits.

Total Hours 45

COURSE OUTCOME

CO's	OUTCOME
CO1	Recognize the importance of IP and to educate the basic concepts of IPR.
CO2	Identify the significance of practice and procedure of Patents.
CO3	Make the students to understand the statutory provisions of different forms of IPRs in simple forms
CO4	Learn the procedure of obtaining patents, copyrights, trademarks & industrial design
CO5	Enable the students to keep their IP rights alive.

CO & PO MAPPING

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	-	2	-	2	1
CO2	-	-	2	-	3	-
CO3	3	-	-	-	1	2
CO4	-	2	-	1	-	-
CO5	1	-	2	-	-	-

Reference Books:

1. Rajeev Babel, Laws Relating to Intellectual Property Rights in India, Bloomsbury Publishing India Pvt. Limited, 2022.
2. Amit Yadav, Intellectual property. Analysis of the general concept and roots of its rights in Indians systems, GRIN Verlag, 2020.
3. Amulya Gurtu, Nisha Dhanraj Dewani, Intellectual Property Rights and the Protection of Traditional Knowledge, IGI Global, 2019.
4. Mahfooz Zafar Nomani, Intellectual Property Rights and Public Policy, New India Publishing Agency, 2018.
5. B. Ramakrishna, H. S. Anil Kumar, Fundamentals of Intellectual Property Rights, Notion Press, 2017.

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- <https://www.wipo.int/about-ip/en/#:~:text=Intellectual>
- <https://ipindia.gov.in/trade-marks.htm>
- <https://www.investopedia.com/terms/c/copyright.asp>
- <https://www.wipo.int/tradesecrets/en>
- <http://www.gpcet.ac.in/wp-content/uploads/2018/02/intellectual-property-rights-anil-105-120.pdf>.

SUB. CODE
23MST21

COURSE NAME
OPERATIONS MANAGEMENT

L T P C
3 0 0 3

Course Objectives:

- To provide a broad introduction to the field of operations management and explain the concepts, strategies, tools and techniques for managing the transformation process that can lead to competitive advantage.
- To enable the students to learn capacity plans and demand forecasting.
- To enable students to identify factors influencing Plant location, Plant layout and Design process.
- To educate students to manage the materials effectively by using appropriate Inventory.
- To understand how to improve productivity by using effective Project management.

UNIT-I INTRODUCTION TO OPERATIONS MANAGEMENT 9

Operations Management – Nature, Importance, historical development, transformation processes, differences between services and goods, a system perspective, functions, challenges, current priorities, recent trends. Operations Strategy – Strategic fit, framework. Productivity; World-class manufacturing practices.

UNIT-II OPERATIONS AND THE VALUE CHAIN 9

Capacity Planning – Long range, Types, Developing capacity alternatives, tools for capacity planning. Facility Location – Theories, Steps in Selection, Location Models. Sourcing and procurement - Strategic sourcing, make or buy decision, procurement process, managing vendors.

UNIT-III DESIGNING OPERATIONS 9

Product Design - Criteria, Approaches. Product development process - stage-gate approach - tools for efficient development. Process - design, strategy, types, analysis. Facility Layout – Principles, Types, Planning tools and techniques.

UNIT-IV PLANNING AND CONTROL OF OPERATIONS 9

Demand Forecasting – Need, Types, Objectives and Steps - Overview of Qualitative and Quantitative methods. Operations planning - Resource planning - Inventory Planning and Control. Operations Scheduling - Theory of constraints - bottlenecks, capacity constrained resources, synchronous manufacturing.

UNIT-V QUALITY MANAGEMENT 9

Definitions of quality, The Quality revolution, quality gurus; TQM philosophies; Quality management tools, certification and awards. Lean Management - philosophy, elements of JIT manufacturing, continuous improvement. Six sigma.

Total Hours 45

COURSE OUTCOME

CO's	OUTCOME
CO1	Understanding of the evolution of operations management practices and world class manufacturing processes
CO2	Knowledge about capacity planning, strategic sourcing and procurement in organizations
CO3	Enhances the understanding of product development and design process
CO4	Ability to forecast demand and overcome bottlenecks
CO5	Provides insight to Quality management tools and practices.

CO & PO MAPPING

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	2	-	-	1	-	-
CO2	-	2	2	3	-	-
CO3	-	3	-	3	2	1
CO4	2	-	2	-	-	2
CO5	1	1	-	-	3	-

Reference Books:

1. William J Stevenson, Operations Management, McGrawHill, 13th Edition 2022.
2. David Gardiner, Hendrik Reefke, Operations Management for Business Excellence, Taylor & Francis, 2019.
3. Andrew Greasley, Absolute Essentials of Operations Management, Taylor & Francis, 2019.
4. David W. Parker, Service Operations Management, Edward Elgar Publishing, Incorporated, 2nd Edition 2018.
5. Jay Heizer, Barry Render, Chuck Munson, Amit Sachan, Operations Management, Pearson Education, 12th Edition 2017.

Online Sources

- <https://www.studytonight.com/operating-system/process-scheduling>
- www.materialsmanagement.info/defscope/index.htm
- <http://nptel.ac.in/courses/110106045/>, "Operations and Supply Chain Management", Prof. G. Srinivasan Department of Management Studies, Indian Institute of Technology, Madras.
- <http://nptel.ac.in/courses/112107143/22>, "Materials Management", Prof. Inderdeep Singh, Department of Mechanical & Industrial Engineering, Indian Institute of Technology, Roorkee.

SUB. CODE
23MST22

COURSE NAME
HUMAN RESOURCE MANAGEMENT

L T P C
3 0 0 3

Course Objectives:

- To provide knowledge about management issues related to staffing, training, performance, compensation, human factors consideration and compliance with human resource requirements
- To familiarize students with contemporary practices in Human Resource Management
- To provide knowledge about training and development.
- To practice ethical values in achieving stakeholders compensation and welfare. To demonstrate knowledge on appraisal method and develop strategies to empower employees.

UNIT-I PERSPECTIVES IN HUMAN RESOURCE MANAGEMENT 9

Evolution of human resource management – The importance of the human capital – Role of human resource manager –Challenges for human resource managers - trends in Human resource policies – Computer applications in human resource management – Human resource accounting and audit.

UNIT-II HUMAN RESOURCE PLANNING AND RECRUITMENT 9

Importance of Human Resource Planning – Forecasting human resource requirement –matching supply and demand - Internal and External sources- Organizational Attraction-. Recruitment, Selection, Induction and Socialization- Theories, Methods and Process.

UNIT-III TRAINING AND DEVELOPMENT 9

Types of training methods –purpose- benefits- resistance. Executive development programme – Common practices - Benefits – Self development – Knowledge management.

UNIT-IV EMPLOYEE ENGAGEMENT 9

Compensation plan – Reward – Motivation – Application of theories of motivation – Career management – Mentoring - Development of mentor – Protégé relationships- Job Satisfaction, Employee Engagement, Organizational Citizenship Behavior: Theories, Models.

UNIT-V PERFORMANCE EVALUATION AND CONTROL 9

Method of performance evaluation – Feedback – Industry practices. Promotion, Demotion, Transfer and Separation – Implication of job change. The control process – Importance –Methods – Requirement of effective control systems grievances – Causes – Implications – Redressal methods.

Total Hours 45

COURSE OUTCOME

CO's	OUTCOME
CO1	Students would have gained knowledge on the various aspects of HRM
CO2	Students will gain knowledge needed for success as a human resources professional
CO3	Students will develop the skills needed for a successful HR manager
CO4	Students would be prepared to implement the concepts learned in the workplace.
CO5	Students would be aware of the emerging concepts in the field of HRM

CO & PO MAPPING

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	-	3	1	-	3
CO2	-	3	-	2	-	-
CO3	-	3	-	-	1	2
CO4	-	1	2	1	1	3
CO5	2	1	1	-	-	2

Reference Books:

1. Gary Dessler, Biju Varrkey, Human Resource Management, Pearson, 16th Edition 2023
2. Ralf Caers, Human Resource Management, Intersentia, 3rd Edition 2021.
3. Raymond J. Stone, Anne Cox, Mihajla Gavin, Human Resource Management, Wiley, 10th Edition 2020.
4. Mick Marchington, Adrian Wilkinson, Rory Donnelly, Anastasia Kynighou, Human Resource Management at Work, Kogan Page, 2020.
5. Adrian Wilkinson, David Lepak, Nicolas Bacon, Scott Snell, The SAGE Handbook of Human Resource Management, SAGE Publications, 2019.

Online Sources

- <https://www.questionpro.com/blog/performance-evaluation/>
- <https://www.scribd.com/doc/23262764/Unit-4-Sustaining-Employee-Interest>
- <http://nptel.ac.in/courses/122105020/9>, "Training and Development", Prof. Kalyan Chakravarti, Indian Institute of Technology, Kharagpur
- <http://nptel.ac.in/courses/109104068/>"Exploring Human Values", Prof.A K Sharma, IIT Kanpur.

SUB. CODE
23MST23

COURSE NAME
FINANCIAL MANAGEMENT

L T P C
3 0 0 3

Course Objectives:

- To understand the operational nuances of a Finance Manager.
- To comprehend the technique of making decisions related to finance functions.
- To make the students to understand the theories & determinants influencing financing, divided decisions taken in the firm.
- To acquire knowledge on working capital requirement.
- To educate the students to understand the long term sources of finance for raising the funds.

UNIT-I FOUNDATIONS OF FINANCE

9

Introduction to finance- Financial Management – Nature, scope and functions of Finance, organization of financial functions, objectives of Financial management, Major financial decisions – Time value of money – features and valuation of shares and bonds – Concept of risk and return – single asset and of a portfolio.

UNIT-II INVESTMENT DECISIONS

9

Capital Budgeting: Principles and techniques - Nature of capital budgeting- Identifying relevant cash flows - Evaluation Techniques: Payback, Accounting rate of return, Net Present Value, Internal Rate of Return, Profitability Index - Comparison of DCF techniques - Concept and measurement of cost of capital - Specific cost and overall cost of capital.

UNIT-III FINANCING AND DIVIDEND DECISION

9

Leverages - Operating and Financial leverage – measurement of leverages – degree of Operating & Financial leverage – Combined leverage, EBIT – EPS Analysis- Indifference point. Capital structure – Theories – Net Income Approach, Net Operating Income Approach, MM Approach – Determinants of Capital structure. Dividend decision- Issues in dividend decisions, Importance, Relevance & Irrelevance theories- Walter's – Model, Gordon's model and MM model. – Factors determining dividend policy – Types of dividend policies – forms of dividend.

UNIT-IV WORKING CAPITAL MANAGEMENT

9

Principles of working capital: Concepts, Needs, Determinants, issues and estimation of working capital - Receivables Management - Inventory management – Cash management - Working capital finance : Commercial paper, Company deposit, Trade credit, Bank finance.

UNIT-V LONG TERM SOURCES OF FINANCE

9

Indian capital market- New issues market- Secondary market - Long term finance: Shares, debentures and term loans, lease, hire purchase, venture capital financing, Private Equity.

COURSE OUTCOME

CO's	OUTCOME
CO1	Identify the concepts of financial decision of an organisation
CO2	Recognize the time value of money
CO3	Learn the capital budgeting and cost of capital techniques
CO4	Understand how to decide the decision of capital structure and distribution of dividend
CO5	Assess the short-term and long-term sources of finance

CO & PO MAPPING

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	-	-	2	-	-
CO2	-	1	-	-	3	2
CO3	3	-	3	-	-	2
CO4	-	1	3	-	2	-
CO5	1	-	-	2	-	-

Reference Books:

1. I.M. Pandey, Financial Management, Pearson, 12th Edition 2022.
2. Begoña Álvarez García, José-Pablo Abeal-Vázquez, Emerging Tools and Strategies for Financial Management, IGI Global, 2020.
3. Dr. F. C. Sharma, Rachit Mittal, Financial Management, SBPD Publications, 2020.
4. Ronald W. Melicher, Edgar A. Norton, Edgar Norton, Introduction to Finance, Wiley, 2019.
5. Dr. S.K. Sharma, Dr. Rachan Sareen, Fundamentals of Financial Management, Sultan Chand & Sons (P) Ltd, 2019.

Online Sources

- www.economicdiscussion.net/investment-decisions/investment-decisions.../21976
- <https://financial-dictionary.thefreedictionary.com/Investment+decisions>
- <http://nptel.ac.in/courses/110106043/3>, "Basics of Financial Management", Prof. A. Thillai Rajan Department of Management Studies Indian Institute of Technology, Madras.
- <http://nptel.ac.in/courses/110105057/>, "International Financial Environment", Prof. A. K. Misra Department of Management Indian Institute of Technology, Kharagpur

SUB. CODE
23MST24

COURSE NAME
MARKETING MANAGEMENT

L T P C
3 0 0 3

Course Objectives:

- To understand the changing business environment and the fundamental premise underlying market driven strategies.
- To identify the indicators of management thoughts and practices.
- To understand fundamental premise underlying market driven strategies.
- To provide insight on the basic concepts of marketing and the various marketing environment factors that impact formulation of marketing strategies.
- To facilitate understanding about the dynamics of consumer behavior and the utility of marketing research.

UNIT-I INTRODUCTION

9

Defining Marketing – Core concepts in Marketing – Evolution of Marketing – Marketing Planning Process – Scanning Business environment: Internal and External – Value chain – Core Competencies – PESTEL – SWOT Analysis – Marketing interface with other functional areas – Production, Finance, Human Relations Management, Information System – Marketing in global environment – International Marketing – Rural Marketing – Prospects and Challenges.

UNIT-II MARKETING STRATEGY

9

Marketing strategy formulations – Key Drivers of Marketing Strategies - Strategies for Industrial Marketing – Consumer Marketing – Services marketing – Competition Analysis – Analysis of consumer and industrial markets – Influence of Economic and Behavioral Factors – Strategic Marketing Mix components.

UNIT-III MARKETING MIX DECISIONS

9

Product planning and development – Product life cycle – New product Development and Management – Defining Market Segmentation – Targeting and Positioning – Brand Positioning and Differentiation – Channel Management – Managing Integrated Marketing Channels – Managing Retailing, Wholesaling and Logistics – Advertising and Sales Promotions – Pricing Objectives, Policies and Methods.

UNIT-IV BUYER BEHAVIOUR

9

Understanding Industrial and Consumer Buyer Behavior – Influencing factors – Buyer Behaviour Models – Online buyer behaviour – Building and measuring customer satisfaction – Customer relationships management – Customer acquisition, Retaining, Defection – Creating Long Term Loyalty Relationships.

UNIT-V MARKETING RESEARCH & TRENDS IN MARKETING

9

Marketing Information System – Marketing Research Process – Concepts and applications: Product – Advertising – Promotion – Consumer Behaviour – Retail research – Customer driven organizations - Cause related marketing – Ethics in marketing – Online marketing trends - social media and digital marketing.

Total Hours 45

COURSE OUTCOME

CO's	OUTCOME
CO1	Applied knowledge of contemporary marketing theories to the demands of business and management practice.
CO2	Enhanced knowledge of marketing strategies for consumer and industrial marketing
CO3	Deep understanding of choice of marketing mix elements and managing integrated marketing channels
CO4	Ability to analyze the nature of consumer buying behaviour
CO5	Understanding of the marketing research and new trends in the arena of marketing

CO & PO MAPPING

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	1	-	2	-	3	-
CO2	3	2	-	-	-	1
CO3	-	1	-	3	-	-
CO4	-	-	3	2	-	3
CO5	1	-	-	3	2	3

Reference Books:

1. Philip Kotler, Kevin Lane Keller, Alexander Chernev, Marketing Management, Pearson, 2022.
2. Masaaki (Mike) Kotabe, Kristiaan Helsen, Global Marketing Management, Wiley, 2022.
3. Seohee Park, Marketing Management, Seohee Academy, 2020.
4. Chernev, Alexander, Strategic Marketing Management, Cerebellum Press, 9th Edition 2018.
5. Mike Grigsby, Marketing Analytics, Kogan Page, 2018.

Online Sources

- <https://www.mymarketresearchmethods.com/the-market-research>
- <https://www.mbaskool.com> > Concepts > Marketing and Strategy
- <http://nptel.ac.in/courses/110104055/37>, "Strategic Marketing-Contemporary Issues", Prof. Jayanta Chatterjee Department of Industrial and Management Engineering Indian Institute of Technology, Kanpur
- <http://nptel.ac.in/syllabus/110105029/>, "Consumer Behaviour", Dr. Sangeeta Sahney, IIT Kharagpur.

SUB. CODE	COURSE NAME	L	T	P	C
23MST25	QUANTITATIVE TECHNIQUES FOR MANAGEMENT	3	0	0	3

Course Objectives:

- To apply quantitative techniques in modeling and solving business related problems.
- To comprehend and solve mathematical model of transportation and assignment problems.
- To provide knowledge on Game Theory and Decision theory in real time applications.
- To understand basic concepts, strategies and replacement model techniques to analyze the problems.
- To provide necessary mathematical support and confidence to tackle real time problems.

UNIT-I INTRODUCTION TO LINEAR PROGRAMMING (LP) 9

Relevance of quantitative techniques in management decision making. Linear Programming- formulation, solution by graphical and simplex methods (Primal - Penalty, Two Phase), Special cases. Sensitivity Analysis.

UNIT-II LINEAR PROGRAMMING EXTENSIONS 9

Transportation Models (Minimising and Maximising Problems) – Balanced and unbalanced Problems – Initial Basic feasible solution by N-W Corner Rule, Least cost and Vogel's approximation methods. Check for optimality. Solution by MODI / Stepping Stone method. Case of Degeneracy. Transshipment Models. Assignment Models (Minimising and Maximising Problems) – Balanced and Unbalanced Problems. Solution by Hungarian and Branch and Bound Algorithms. Travelling Salesman problem. Crew Assignment Models.

UNIT-III DECISION AND GAME THEORIES 9

Decision making under risk – Decision trees – Decision making under uncertainty. Game Theory-Two-person Zero sum games-Saddle point, Dominance Rule, Convex Linear Combination (Averages), methods of matrices, graphical and LP solutions.

UNIT-IV INVENTORY AND REPLACEMENT MODELS 9

Inventory Models – EOQ and EBQ Models (With and without shortages), Quantity Discount Models. Replacement Models-Individual replacement Models (With and without time value of money) – Group Replacement Models.

UNIT-V QUEUING THEORY AND SIMULATION 9

Queuing Theory - single and multi-channel models – infinite number of customers and infinite calling source. Monte Carlo simulation – use of random numbers, application of simulation Techniques.

Total Hours 45

COURSE OUTCOME

CO's	OUTCOME
CO1	Linear programming in product mix decisions
CO2	Transportation and assignment in logistics and job allocation scenarios
CO3	Game theory and heuristics of decision making in real time decisions
CO4	Inventory management and replacement models in manufacturing context
CO5	Queuing and simulation in real time scenario optimisation

CO & PO MAPPING

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	-	-	1	-	2	-
CO2	3	2	-	2	2	-
CO3	1	2	-	-	-	3
CO4	-	-	2	-	-	-
CO5	-	3	-	-	2	1

Reference Books:

1. Tony Webber, Quantitative Methods in Aviation Management, Cambridge Scholars Publishing, 2023.
2. Jeffrey D. Camm, James J. Cochran, Michael J. Fry, Jeffrey W. Ohlmann, David R. Anderson, An Introduction to Management Science: Quantitative Approaches to Decision Making, Cengage Learning, 2022.
3. Marvin Titus, Higher Education Policy Analysis Using Quantitative Techniques, Springer International Publishing, 2021.
4. Miguel Ángel Canela, Inés Alegre, Alberto Ibarra, Quantitative Methods for Management, Springer International Publishing, 2019.
5. Willem Mertens, Amedeo Pugliese, Jan Recker, Quantitative Data Analysis, Springer International Publishing, 2016.

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- <https://www.shmula.com/queueing-theory>
- <https://businessjargons.com/linear-programming.htm>
- <http://nptel.ac.in/courses/110106045/>, "Operations and Supply Chain Management", Prof. G.Srinivasan Department of Management Studies, Indian Institute of Technology, Madras.
- <http://nptel.ac.in/courses/112107143/22>, "Materials Management", Prof. Inderdeep Singh, Department of Mechanical & Industrial Engineering, Indian Institute of Technology, Roorkee.

SUB. CODE
23MST26

COURSE NAME
BUSINESS RESEARCH METHODS

L T P C
3 0 0 3

Course Objectives:

- To make the students to understand the principles of scientific methodology in business enquiry, develop analytical skills of business research and to prepare scientific business reports.
- To introduce the measurement tools and test for its validity and reliability.
- To develop the skills for scientific data collection methods and sampling technique.
- To familiarize the students with the application of basic analytical tools.
- To develop analytical skills of business research and to prepare scientific business reports.

UNIT-I INTRODUCTION

9

Business Research – Definition and Significance – the research process – Types of Research – Exploratory and causal Research – Theoretical and empirical Research – Cross –Sectional and time – series Research – Research questions / Problems – Research objectives – Research hypotheses – characteristics – Research in an evolutionary perspective – the role of theory in research.

UNIT-II RESEARCH DESIGN AND MEASUREMENT

9

Research design – Definition – types of research design – exploratory and causal research design – Descriptive and experimental design – different types of experimental design – Validity of findings – internal and external validity – Variables in Research – Measurement and scaling – Different scales – Construction of instrument – Validity and Reliability of instrument.

UNIT-III DATA COLLECTION

9

Types of data – Primary Vs Secondary data – Methods of primary data collection – Survey Vs Observation – Experiments – Construction of questionnaire and instrument – Types of Validity – Sampling plan – Sample size – determinants optimal sample size – sampling techniques – Sampling methods.

UNIT-IV DATA PREPARATION AND ANALYSIS

9

Data Preparation – editing – Coding –Data entry – Validity of data – Qualitative Vs Quantitative data analyses – Applications of Bivariate and Multivariate statistical techniques, Factor analysis, Discriminant analysis, Cluster analysis, Multiple regression and Correlation, Multidimensional scaling – Conjoint Analysis – Application of statistical software for data analysis.

UNIT-V REPORT DESIGN, WRITING AND ETHICS IN BUSINESS RESEARCH

9

Research report –Types – Contents of report – need for executive summary – chapterization – contents of chapter – report writing – the role of audience – readability – comprehension – tone – final proof – report format – title of the report – ethics in research – Ethics in research – Subjectivity and Objectivity in research.

Total Hours 45

COURSE OUTCOME

CO's	OUTCOME
CO1	Students will understand and appreciate scientific inquiry
CO2	Students would know to write research proposals
CO3	The students would be able to undertake a systematic outlook towards business situations for the purpose of objective decision making, and the method of conducting scientific inquiry to solve organizational problems
CO4	Students would be able to analyze data and find solutions to the problems.
CO5	Students could prepare research reports

CO & PO MAPPING

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	2	-	-	1	-	1
CO2	3	-	-	-	2	-
CO3	1	-	3	2	-	3
CO4	-	2	2	3	2	-
CO5	-	3	-	2	1	-

Reference Books:

1. Emma Bell, Alan Bryman, Bill Harley, Business Research Methods, Oxford University Press, 6th Edition 2022.
2. Pamela Schindler, Pamela S. Schindler, Loose Leaf for Business Research Methods, McGraw-Hill Education, 2021.
3. Alain Verbeke, Bo Bernhard Nielsen, Lorraine Eden, Research Methods in International Business, Springer International Publishing, 2019.
4. Uma Sekaran, Roger Bougie, Research Methods For Business, Wiley, 2019.
5. Donald R. Cooper, Business Research A Guide to Planning, Conducting, and Reporting Your Study, SAGE Publications, 2018.

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- <https://research-methodology.net/research-methods/data-collection/>.
- <https://businessjargons.com/data-collection.html>
- <http://textofvideo.nptel.iitm.ac.in/109104045/lec8>, "Primary and Secondary Data and Related Issues", Prof. A. K. Sharma Department of Humanities and Social Sciences Indian Institute of Technology, Kanpur.
- <http://nptel.ac.in/courses/107108011/20>, "Reviewing of Literature", Amaresh Chakrabarti, Professor, Centre for Product Design and Manufacturing Indian Institute of Science, Bangalore, India.

SUB. CODE
23MST27

COURSE NAME
BUSINESS ANALYTICS AND INTELLIGENCE

L T P C
3 0 0 3

Course Objectives:

- To use business analytics for decision making.
- To apply the appropriate analytics and generate solutions.
- To learn model and analyse the business situation using analytics.
- To predict future events or outcomes by analyzing patterns in a given set of input data.
- To pull together data and operations to produce the roadmap that guides what to do and how to do it right.

UNIT-I INTRODUCTION TO BA AND BI 9

Business Analytics – Terminologies, Process, Importance, Relationship with Organisational Decision Making, BA for Competitive Advantage – Evolution of Business Intelligence (BI) – Tools in BI.

UNIT-II MANAGING RESOURCES FOR BUSINESS ANALYTICS 9

Managing BA Personnel, Data and Technology. Organisational Structures aligning BA. Managing Information policy, data quality and change in BA.

UNIT-III DESCRIPTIVE ANALYTICS 9

Introduction to Descriptive analytics - Visualising and Exploring Data - Descriptive Statistics - Sampling and Estimation - Probability Distribution for Descriptive Analytics - Analysis of Descriptive analytics.

UNIT-IV PREDICTIVE ANALYTICS 9

Introduction to Predictive analytics - Logic and Data Driven Models - Predictive Analysis Modeling and procedure - Data Mining for Predictive analytics. Analysis of Predictive analytics.

UNIT-V PRESCRIPTIVE ANALYTICS 9

Introduction to Prescriptive analytics - Prescriptive Modeling - Non Linear Optimisation - Demonstrating Business Performance Improvement.

Total Hours 45

COURSE OUTCOME

CO's	OUTCOME
CO1	Ability to understand the role of Business Analytics in decision making
CO2	Ability to identify the appropriate tool for the analytics scenario
CO3	Ability to apply the descriptive analytics tools and generate solutions
CO4	Understanding of Predictive Analytics and applications
CO5	Knowledge of Prescriptive Analytics and demonstrating business process improvement

CO & PO MAPPING

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	-	1	-	3	3
CO2	-	2	-	1	-	-
CO3	-	2	2	-	-	1
CO4	1	-	-	3	-	2
CO5	1	3	1	-	3	-

Reference Books:

1. Felix Weber, Artificial Intelligence for Business Analytics, Springer Fachmedien Wiesbaden, 2023.
2. Steven Finlay, Artificial Intelligence and Machine Learning for Business, Relativistic, 2021.
3. Manuel Filipe Santos, Ana Azevedo, Integration Challenges for Analytics, Business Intelligence, and Data Mining, IGI Global, 2020.
4. Ramesh Sharda, Dursun Delen, Efraim Turban, Business Intelligence, Analytics, and Data Science, Pearson, 2018.
5. Rajendra Akerkar, Artificial Intelligence for Business, Springer International Publishing, 2018.

Online Sources

- https://michael.hahsler.net/SMU/EMIS3309/slides/Evans_Analytics2e_ppt_01.pdf
- <https://www.analyticsvidhya.com/blog/2019/05/practical-introduction-prescriptive-analytics/>
- <https://www.youtube.com/watch?v=jr0KpLCH2gs>

SUB. CODE
23MSL21

COURSE NAME
CORPORATE ETHICS

L T P C
0 0 4 2

Course Objectives:

- To enable the learners to have exposure on business ethics and ethical business perspectives.
- To providing a set of principles that affect employee mindset and decision-making.
- To use decision-making models in ethical dilemmas situation on workplace
- To prove criteria of employees' ethical behavior in decision making in conflict situations
- To classify and define stakeholders interests in social, marketing problems of the company taking into account the ethical dilemmas of business

UNIT-I	Individual Culture and Ethics	12
UNIT-II	Ethical codes of conduct and value Systems	12
UNIT-III	Loyalty and Ethical Behaviour, Ethical decision making	12
UNIT-IV	Ethical business issues and solutions	12
UNIT-V	Corporate Social Responsibilities of Business	12

Total Hours 60

COURSE OUTCOME

CO's	OUTCOME
CO1	The learners can handle issues of corporate ethics and offer solutions ethical perspectives
CO2	The learners are able to apply the basic concepts of Indian ethos and value systems at work.
CO3	The learners can handle issues of business ethics and offer solutions in ethical perspectives
CO4	The learners are professionally efficient and skilful in value systems and culture
CO5	The learners are capable in ethically manage business towards well being of the society.
CO6	The learners can be socially effective in undertaking business responsibilities.

CO & PO MAPPING

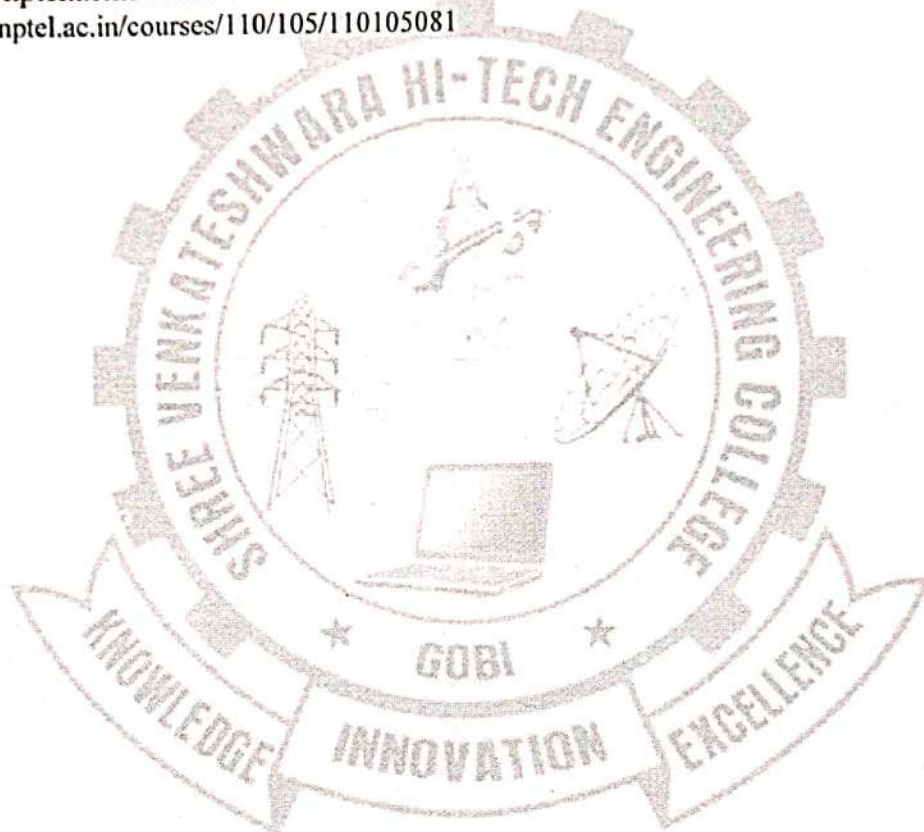
CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	1	2	-	-	-	-
CO2	1	1	3	-	1	2
CO3	-	3	2	1	-	-
CO4	-	1	1	-	1	-
CO5	2	3	-	-	1	1
CO6	1	-	2	1	3	-

Reference Books:

1. Gabriel Flynn, Leadership and Business Ethics, Springer Netherlands, 2022.
2. Archie B. Carroll, Jill Brown, Business & Society: Ethics, Sustainability & Stakeholder Management, Cengage Learning, 2022.
3. Joseph W. Weiss, Business Ethics, Berrett-Koehler Publishers, 7th Edition 2021.
4. A.C. Fernando, Business Ethics: An Indian Perspective, Pearson, 2020.
5. Stephen M Byars, Kurt Stanberry, Business Ethics, OpenStax, 2018.

Online Sources

- <http://nptel.ac.in/courses/110/105/110105079>
- <http://nptel.ac.in/courses/110/105/110105081>



SUB. CODE
23MSL22

COURSE NAME
DATA ANALYSIS AND BUSINESS MODELING
(LABORATORY)

L T P C
0 0 4 2

Course Objectives:

- To have hands-on experience on data analysis for business modeling problems
- To discovering useful information and informing conclusions.
- To supporting decision-making.
- To help students to learn about the tools used for research analysis.
- To disseminate the students about networking, inventory models and queuing theory using data analytical tools

Exp.no	Details of experiments	Duration
1	Descriptive Statistics	5
2	Parametric Tests	5
3	Non-parametric Tests	5
4	Correlation & Regression	5
5	Forecasting	5
6	Portfolio Selection	5
7	Risk Analysis & Sensitivity Analysis	5
8	Revenue Management	5
9	Transportation & Assignment	5
10	Networking Models	5
11	Queuing Theory	5
12	Inventory Models	5

Total Hours 60

COURSE OUTCOME

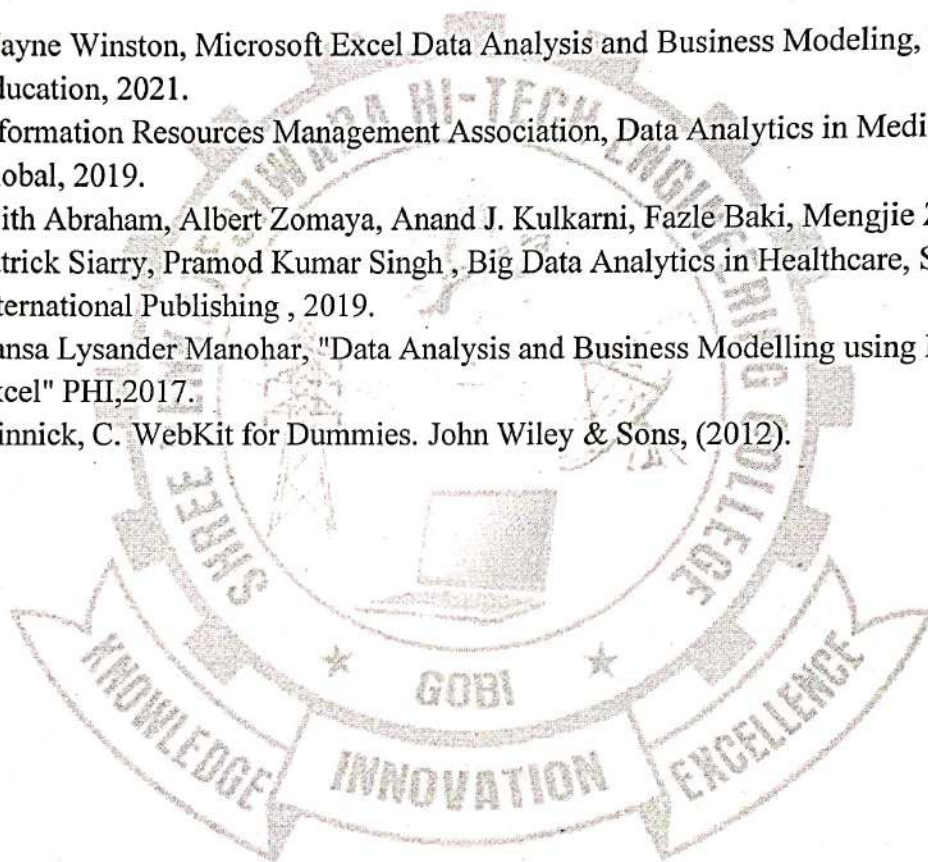
CO's	OUTCOME
CO1	Deep knowledge about the nature of data and conducting hypothesis testing using various dataanalysis techniques
CO2	Facilitates to identify the relationship between variables using data analytical tools
CO3	Provides understanding about forecasting in real time business world using analytical tools
CO4	Ability to conduct Risk and sensitivity analysis and portfolio selection based on business data
CO5	Enhances knowledge about networking, inventory models and queuing theory using dataanalytical tools

CO & PO MAPPING

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	2	3	2	1	-	1
CO2	-	1	-	-	3	2
CO3	3	-	-	3	2	1
CO4	-	2	1	-	-	3
CO5	1	-	2	1	-	-

Reference Books:

1. Wayne Winston, Microsoft Excel Data Analysis and Business Modeling, Pearson Education, 2021.
2. Information Resources Management Association, Data Analytics in Medicine, IGI Global, 2019.
3. Ajith Abraham, Albert Zomaya, Anand J. Kulkarni, Fazle Baki, Mengjie Zhang, Patrick Siarry, Pramod Kumar Singh , Big Data Analytics in Healthcare, Springer International Publishing , 2019.
4. Hansa Lysander Manohar, "Data Analysis and Business Modelling using Microsoft Excel" PHI,2017.
5. Minnick, C. WebKit for Dummies. John Wiley & Sons, (2012).



Shree Venkateshwara Hi-Tech Engineering College (Autonomous)

SUB. CODE
23MCL21

COURSE NAME
CASE STUDY

L T P C
0 0 2 0

Course Objectives:

- To critically review of various industries cases and apply a structured problem-solving process to real business situations .
- To assess industry profitability and overall company success through the analysis of cases.
- To identify which drivers make the greatest contribution to the company's financial outcomes and overall success.
- To summarize the steps performed in the analysis of a given case in the form of a presentation to a group of peers.
- To demonstrate the ability to provide analysis and recommendations in the form of a written case report.

S.No	List of Experiments	Duration
1	Economic Analysis	3
2	Organizational Behavior	3
3	Financial Position Analysis	3
4	Industrial Dispute	3
5	Cyber Crimes	3
6	Time Value of Money	3
7	Training and development	3
8	Quality Management	3
9	Recent trends in marketing	3
10	Event planning and customer satisfaction	3

COURSE OUTCOME

CO's	OUTCOME
CO1	Students can develop competencies in critical thinking and practical action.
CO2	Students can effectively lead a group of peers in the analysis of a case.
CO3	Students develop a realization and awareness that there are multiple "right" and "wrong" answers to business cases.
CO4	Students can more accurately identify the action recommendation that will result in a successful resolution.
CO5	Students can able to write a professional quality case report.

CO & PO MAPPING

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	2	3	-	1	-	1
CO2	-	1	-	-	3	2
CO3	-	-	-	3	2	1
CO4	-	3	1	-	-	-
CO5	2	-	2	3	-	-