

Minor Degree : Innovation, Entrepreneurship, and Venture Development (IEV)												
Sl. No.	Course and Course code		Course Title	Teaching Dept.	Teaching Hours/Week			Examination				
					Theory Lecture	Tutorial	Practical /Drawing	Duration in hr	CIE Marks	SEE Marks	Total Marks	Credits
					L	T	P					
1.	PCC	25MBA101	Introduction to entrepreneurship	MBA	3	0	0	3	50	50	100	3
2.	PCC	25MBA102	Business plan and new venture creation	MBA	3	0	0	3	50	50	100	3
3.	PCC	25MBA103	Marketing for entrepreneurs	MBA	3	0	0	3	50	50	100	3
4.	PCC	25MBA104	Financial management for entrepreneurs	MBA	3	0	0	3	50	50	100	3
5.	PCC	25MBA105	Lean start-up & customer discovery	MBA	3	0	0	3	50	50	100	3
6.	PCC	25MBA106	New product development	MBA	3	0	0	3	50	50	100	3
TOTAL					18	0	0	18	300	300	600	18

INTRODUCTION TO ENTREPRENEURSHIP			
Course Code: 25MBA101		Course Type	PCC
Teaching Hours/Week (L: T: P: S)	3:0:0:0	Credits	03
Total Teaching Hours	45	CIE + SEE Marks	50+50
Teaching Department: Master of Business Administration			
Course Objectives:			
1.	To introduce the fundamental concepts of entrepreneurship and its critical role in socio-economic development.		
2.	To understand the entrepreneurial mindset, including leadership, motivation, and psychological tools like Johari's Window for effective interpersonal operation		
3.	To equip students with effectual reasoning principles and lean startup methodologies to solve problems and manage risks.		
4.	To gain knowledge on various legal entities, incorporation processes, and the diverse sources of funding available for ventures.		
5.	To know the dynamics of the startup ecosystem and the importance of a growth mindset in navigating startup failures.		
UNIT-I			
Introduction to entrepreneurship			9 Hours
Meaning and concept of entrepreneurship, Entrepreneurs and Entrepreneurship, The Evolution of Entrepreneurship Thought, role of entrepreneurship in economic development, Socio-economic benefits from entrepreneurship, entrepreneurial competencies, and entrepreneurial success stories.			
UNIT-II			
Leadership, motivation & Power			9 Hours
Stress and the entrepreneur-the entrepreneurial ego-Entrepreneurial motivations- Corporate Entrepreneurial Mindset How people think and operate when working with others, Johari's Window. The appeals that is most persuasive to influence others. organizational systems and conventionally used management paradigms			
UNIT-III			
Effective Entrepreneurship: Effective reasoning			9 Hours
Problem and process, principles of effectual reasoning- Pilot in the plane principle, The affordable loss principle, principles of entrepreneurial expertise- The bird-in-hand principle, The first principle thinking, The crazy quilt principle, The lemonade principle, Lean Startup Principle			
UNIT-IV			
Choice of Business Vehicle & Funding			9 Hours
Types of Legal entities- Proprietary, Partnership, Limited Liability Partnership, One person company, Private limited and public limited company; Limited Liability Partnership (LLP)—Hybrid nature, Incorporation process, Drafting the LLP Agreement, Rights and Liabilities of			

Designated Partners; Companies Act 2013—Features of Private and Public Companies; Sources of Funding: Equity and Debt, Angel funding, Debts, Venture funding, Private equity, and IPO															
UNIT-V															
Growth Mindset & Ecosystem											9 Hours				
Fixed vs Growth Mindset in Startup Failure, Startup Failure Case Studies, Startup ecosystem; major players in the ecosystem such as; Policy makers, Supporting business, Educational and research institutions, financial institutions, large companies, mentors and publics; their contribution and impact.															
Course Outcomes: At the end of the course student will be able to															
1.	Knowledge about the core concepts of entrepreneurship and the role of entrepreneurial competencies.														
2.	Understand the entrepreneurial mindset, motivations, and frameworks like Johari's Window.														
3.	Gain the skills on applying effectual reasoning and Lean Startup principles to problem-solving.														
4.	To acquire knowledge on different types of business entities and various funding sources.														
5.	To understand the startup ecosystem, growth mindsets, and the impact of major stakeholders														
Course Outcomes Mapping with Program Outcomes & PSO															
Program Outcomes →		1	2	3	4	5	6	7	8	9	10	11	PSO ↓		
↓ Course Outcomes													1	2	3
ME1251-1-1.1		3	-	-	-	-	-	-	2	2	-	3	-	1	-
ME1251-1-1.2		3	-	-	-	-	-	-	2	2	-	3	-	2	-
ME1251-1-1.3		3	-	-	-	-	-	-	2	2	-	3	-	2	-
ME1251-1-1.4		3	-	-	-	-	-	-	2	2	-	3	-	2	-
ME1251-1-1.5		3	-	-	-	-	-	-	2	2	-	3	-	2	-
1: Low 2: Medium 3: High															
TEXTBOOKS:															
1.	Entrepreneurship- Theory, Process, Practice – Donald F. Kuratko – Cengage 10th Edition														
2.	Nielsen, S. L., Klyver, K., Evald, M. R., & Bager, T. Entrepreneurship in theory and practice: paradoxes in play, Edward Elgar Publishing, Cheltenham, UK.														
REFERENCE BOOKS:															
1.	Alexander Osterwalder, Yves Pigneur, Gregory Bernarda, Value Proposition Design- How to Create Products and Services Customers want, Alan Smith, Wiley Publications														

2.	Eric Ries, The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses
3.	Chip Heath, Dan Heath, Made to Stick: Why Some Ideas Survive and Others Die
4.	Steve Blank and Bob Dorf, The Startup Owner's Manual: The Step-By-Step Guide for Building a Great Company

BUSINESS PLAN AND NEW VENTURE CREATION			
Course Code:	25MBA102	Course Type	PCC
Teaching Hours/Week (L: T: P: S)	3:0:0:0	Credits	03
Total Teaching Hours	45	CIE + SEE Marks	50+50
Teaching Department: Master of Business Administration			
Course Objectives:			
1.	To introduce the fundamental concepts of business plan preparation and the process of achieving a value proposition fit		
2.	To understand the various methods of initiating ventures, including feasibility analysis and market competition study.		
3.	To equip students with knowledge of diverse market entry models, including direct/indirect channels and family business transitions.		
4.	To gain knowledge on startup capital, venture capital evaluation, and various government and alternative financing sources.		
5.	To know the challenges and strategies involved in scaling a venture globally and transitioning from entrepreneur to manager.		
UNIT-I			
Basics of Business Plan			9 Hours
Business Plan Preparation for New Venture: Business plan concept, the nature and importance of the business plan, Pitfalls to avoid in business plan, Elements of a business plan, features of successful business plans, assessment of the business plan. Value map, customer profile- jobs, pains, gains and their ranking, Mapping the Value Proposition of Value Proposition Design, the value map and fit			
UNIT-II			
Methods to initiate Ventures			9 Hours
Approaches to new venture creation, market analysis, financial picture, acquiring an existing venture-Franchising. Product/ Service Feasibility analysis, Industry and Competition Analysis, Environment Analysis, Financial Feasibility Analysis			
Unit- III			
Market Entry for New Ventures			9 Hours

Direct vs Indirect models, Dealers/Franchise/Agent and other approaches. Use of technology in market entry. Online vs offline considerations. Upstream and downstream partnership decisions. Conversion of family business from proprietary to partnership / HUF/ Pvt Limited

UNIT-IV

New Venture Finances

9 Hours

The startup capital, Venture Capital Market, Criteria for evaluating new venture proposals, - Evaluating venture capitalists, Alternate sources of financing, Crowd funding Government Policy packages, financial statements and analysis, Business Incubators and Facilitators

Unit- V

Scaling Ventures

9 Hours

Venture growth, challenges of growing ventures, key elements of growth, the transition from entrepreneurial stage to managerial stage, challenges of scaling globally, global threats and risks. Growth through co-owned, franchise models etc

Course Outcomes: At the end of the course student will be able to

1.	Knowledge about the essential elements of a successful business plan and the tools for value proposition design.
2.	Understand the different approaches to venture creation and conduct thorough feasibility and environmental analyses
3.	Gain the skills on selecting appropriate market entry models and evaluating the role of technology in distribution.
4.	To acquire an understanding of the venture capital market, financial statements, and diverse funding mechanisms.
5.	To understand the complexities of scaling a business, managing growth transitions, and mitigating global risks.

Course Outcomes Mapping with Program Outcomes & PSO

Program Outcomes→	1	2	3	4	5	6	7	8	9	10	11	12	PSO↓		
↓ Course Outcomes													1	2	3
ME1252-1.1	3	-	-	-	-	-	-	2	2	-	3	-	-	1	-
ME1252-1.2	3	-	-	-	-	-	-	2	2	-	3	-	-	2	-
ME1252-1.3	3	-	-	-	-	-	-	2	2	-	3	-	-	2	-
ME1252-1.4	3	-	-	-	-	-	-	2	2	-	3	-	-	2	-
ME1252-1.5	3	-	-	-	-	-	-	2	2	-	3	-	-	2	-

1: Low 2: Medium 3: High

TEXTBOOKS:

1.	Kuratko F. Donald and Hornsby S. Jeffery (2009), New Ventures Management, Entrepreneur Road Map, Pearson Education.
2.	Kuratko F. Donald and Hornsby S. Jeffery (2009): New Ventures Management, Entrepreneur Road Map, and Pearson Education. Stutely, R. (2002) : The Definitive Business Plan, FT Prentice Hall

REFERENCE BOOKS:	
1.	Timmons A. Jeffrey and Jr. Stephen Spinell (2009): New Ventures Creation; Entrepreneurship for the 21st Century, McGraw Hill.
2.	O'Rourke S. James(2009): Writing and presenting business plan, Cengage Learning.
3.	Joshi, Manoj and Srivastava, Apoorva and Shukla, Balvinder, (2014) International Lessons on Innovation for Socio Economic Development in India
4.	Chauhan, A., Abidi, S., Kumar, A., and Joshi, M. (July, 2018), "Reading Tea leaves or Foresightedness- Part II", Business World / Education

Marketing for entrepreneurs			
Course Code:	25MBA103	Course Type	PCC
Teaching Hours/Week (L: T: P: S)	3:0:0:0	Credits	03
Total Teaching Hours	45	CIE + SEE Marks	50+50
Teaching Department: Master of Business Administration			
Course Objectives:			
1.	To introduce the fundamental differences between traditional and entrepreneurial marketing, focusing on the 4Ps versus 4Es in the Indian context..		
2.	To understand the techniques for segmentation, targeting, and positioning (STP) through customer personas and low-cost validation methods like the "Mom Test."		
3.	To equip students with the skills to design a Value Proposition, develop a Minimum Viable Product (MVP), and implement startup-specific pricing strategies.		
4.	To gain knowledge of low-cost digital marketing strategies, including social media, content storytelling, and influencer marketing frameworks.		
5.	To know the essential sales metrics such as CAC, LTV, and Churn Rate, while mastering Go-To-Market (GTM) strategies for growth.		
UNIT-I			
Basics of Entrepreneurial Marketing			09 Hours
Marketing Definition, Difference between Traditional Marketing and Entrepreneurial Marketing. The 4 Ps (Product, Price, Place, Promotion) vs. The 4 Es (Experience, Exchange, Evangelism, Everywhere). Marketing in volatile environments. The role of the founder in building a brand. Understanding the Indian Market context (Tier 1, 2, and 3 cities).			
Unit II			
Segmentation, Targeting, positioning & Validation			09 Hours

Identifying the target audience (Segmentation, Targeting, Positioning). Creating Customer Personas and Empathy Maps. Low-cost market research techniques (Surveys, Interviews, Observation). The "Mom Test" for validating ideas. Problem-Solution Fit. Analyzing Indian consumer behavior and buying patterns.

UNIT-III

Value Proposition, Product Strategy & Pricing

09 Hours

Concept of Minimum Viable Product (MVP) and marketing it. Product-Market Fit (PMF) and how to measure it. Unique Selling Proposition (USP) and Value Proposition Design. Pricing Strategies for Startups in India: Penetration pricing, Skimming, Freemium models, and Subscription models. Value Proposition, tools and process of value proposition design, assessing value proposition design skills. Value propositions for new ventures and existing businesses.

UNIT-IV

Low-Cost Promotion & Digital Marketing

09 Hours

Building marketing strategies, Concept and examples. Digital Marketing Basics: SEO, Social Media Marketing (Instagram, LinkedIn, YouTube). Content Marketing and Storytelling. WhatsApp Marketing strategies. Influencer Marketing (Micro vs. Macro). "Viral" content strategies (STEPPS framework).

UNIT-V

Sales, Metrics & Growth

09 Hours

The Sales Funnel (AIDA Model). Strategies to acquire the first 100 paying customers. Customer Acquisition Cost (CAC) vs. Lifetime Value (LTV). Burn Rate and Churn Rate. Customer Retention strategies. Pitching the Go-To-Market (GTM) strategy to investors.

Course Outcomes: At the end of the course student will be able to

1.	Knowledge about entrepreneurial marketing frameworks and the socio-economic nuances of the Indian market tiers.
2.	Understand customer behavior through empathy maps and validate business ideas using low-cost research techniques.
3.	Gain the skills on designing a Value Proposition and measuring Product-Market Fit for new and existing ventures..
4.	To acquire proficiency in digital marketing tools and "viral" content strategies to build brand presence with limited budgets.
5.	To understand sales funnel management and analyze financial growth metrics to pitch effective GTM strategies to investors.

Course Outcomes Mapping with Program Outcomes & PSO

Program Outcomes→	1	2	3	4	5	6	7	8	9	10	11	12	PSO↓		
↓ Course Outcomes													1	2	3
ME1253-1.1	3	-	-	-	-	-	-	2	2	-	3	-	-	1	-

ME1253-1.2	3	-	-	-	-	-	-	2	2	-	3	-	-	2	-
ME1253-1.3	3	-	-	-	-	-	-	2	2	-	3	-	-	2	-
ME1253-1.4	3	-	-	-	-	-	-	2	2	-	3	-	-	2	-
ME1253-1.5	3	-	-	-	-	-	-	2	2	-	3	-	-	2	-
1: Low 2: Medium 3: High															
TEXTBOOKS:															
1.	Start-up Marketing Strategies in India by M. Anil Ramesh, Priya Grover, & Sabyasachi Dasgupta.														
2.	Digital Marketing by Seema Gupta (Ex-IIM Bangalore).														
REFERENCE BOOKS:															
1.	Fast, Cheap and Viral by Aashish Chopra (for practical content strategies).														
2.	Marketing Management by Philip Kotler and Kevin Lane Keller (Indian adaptation by Abraham Koshy)..														

Financial management for entrepreneurs			
Course Code:	25MBA104	Course Type	PCC
Teaching Hours/Week (L: T: P: S)	3:0:0:0	Credits	03
Total Teaching Hours	45	CIE + SEE Marks	50+50
Teaching Department: Master of Business Administration			
Course Objectives:			
1.	To introduce the fundamental functions and objectives of financial management, emphasizing profit and wealth maximization within the Indian financial system.		
2.	To understand capital budgeting techniques and the time value of money to evaluate investment costs and benefits using appraisal criteria.		
3.	To equip students with the knowledge of various sources of finance and the methods to calculate the weighted average cost of capital (WACC).		
4.	To gain knowledge on capital structure theories and the impact of operating and financial leverages on a firm's value.		
5.	To know the principles of working capital management, including cash and inventory techniques to ensure operational liquidity.		
UNIT-I			
Introduction to Financial Management			09 Hours
Functions of Financial Management, Objectives of Financial Management - Profit Maximization and Wealth Maximization, their social implications Interface of Financial Management with other functional areas, Decisions of Finance, Organization of the Finance Function, Emerging Role of the Financial Manager in India, Overview of Indian Financial System.			

UNIT-II	
Capital Budgeting Decisions	09 Hours
Concept of Time value of Money, Concepts of capital budgeting, Basic principles in estimating costs and benefits of investments, Appraisal criteria for capital budgeting decisions - Payback period, Average rate of return, Net present value, Profitability Index, and Internal rate of return, Conflicts in appraisal, Capital Rationing, Risk analysis in capital budgeting. Financial Modeling using MS Excel.	
UNIT-III	
Cost of Capital and Sources of Finance	09 Hours
Cost of equity and retained earnings, cost of debt, cost of preferred stock, weighted average cost of capital, Factors affecting cost of capital, Long term financing - shares, Debentures, Warrants, Term loans, Lease financing, Hybrid financing, Venture capital financing.	
UNIT-IV	
Capital Structure and Leverages	09 Hours
Introduction, Factors affecting capital structure, features of an optimal capital structure, EBIT - EPS Analysis, Capital structure theories - Net income approach, Net operating income approach, Miller Modigliani propositions I and II and Traditional theory, Leverages - Operating, Financial and Combined, Leverage and firm value.	
UNIT-V	
Working Capital Management and Financing	09 Hours
Meaning; Concepts, Types of Working Capital, Operating Cycle, Importance of Working Capital, Dangers of Inadequate and Excessive Working Capital, Management of Working Capital, Factors determining Working capital, Estimation of Working capital Requirements. Cash Management: Motive of Holding cash, Cash budgeting, Cash collections and disbursement, Options and Strategies for investing and managing Surplus cash, Cash Management Models. Inventory Management: Purpose of holding inventory, Risk and cost of holding inventories, Objectives of Inventory Management, Tools and Techniques of Inventory Management.	
Course Outcomes: At the end of the course student will be able to	
1.	Knowledge about the role of financial management and its interface with other functional areas in a business organization.
2.	Understand the time value of money and apply appraisal criteria like NPV and IRR for capital budgeting decisions.
3.	Gain the skills on identifying various long-term financing sources and calculating the cost of capital for a venture.
4.	To acquire an understanding of capital structure theories and analyze the effects of leverages on EBIT and EPS.
5.	To understand the working capital cycle and apply tools for effective cash and inventory management.

Course Outcomes Mapping with Program Outcomes & PSO															
Program Outcomes →	1	2	3	4	5	6	7	8	9	10	11	12	PSO ↓		
↓ Course Outcomes													1	2	3
ME1254-1-1.1	3	-	-	-	-	-	-	2	2	-	3	-	-	1	-
ME1254-1-1.2	3	-	-	-	-	-	-	2	2	-	3	-	-	2	-
ME1254-1-1.3	3	-	-	-	-	-	-	2	2	-	3	-	-	2	-
ME1254-1-1.4	3	-	-	-	-	-	-	2	2	-	3	-	-	2	-
ME1254-1-1.5	3	-	-	-	-	-	-	2	2	-	3	-	-	2	-
1: Low 2: Medium 3: High															
TEXTBOOKS:															
1.	Chandra Prasanna. (2011) Financial Management Theory & Practice, Tata McGraw Hill.														
REFERENCE BOOKS:															
1.	Horne Van, C. James and Wachowicz John M. (2008) Fundamentals of Financial Management, 13th edition, Prentice Hall, New Delhi.														
2.	Khan and Jain (2012) Financial Management: Text, Problems and Cases, 6th edition, Tata McGraw Hill Education Private Limited.														

LEAN START-UP & CUSTOMER DISCOVERY			
Course Code:	25MBA105	Course Type	PCC
Teaching Hours/Week (L: T: P: S)	3:0:0:0	Credits	03
Total Teaching Hours	45	CIE + SEE Marks	50+50
Teaching Department: Master of Business Administration			
Course Objectives:			
1.	To introduce the Lean Startup methodology, focusing on the Build-Measure-Learn feedback loop and the distinction between search and execution.		

2.	To understand the customer discovery process by identifying "Leap of Faith" assumptions and mastering non-leading interview techniques like the "Mom Test."
3.	To equip students with skills in MVP design, utilizing rapid prototyping, wireframing, and no-code tools for early-stage validation..
4.	To gain knowledge of actionable metrics versus vanity metrics, applying the AARRR (Pirate Metrics) framework to make data-driven decisions.
5.	To know how to develop and iterate the Business Model Canvas and Value Proposition Canvas based on continuous customer feedback.
UNIT-I	
The Lean Methodology	
09 Hours	
Traditional Business Plan vs. Lean Startup. The "Build-Measure-Learn" feedback loop. The concept of "Search vs. Execution" in startups. Key definitions: Pivot (Zoom-in, Zoom-out, Platform pivot), MVP (Minimum Viable Product), and Runway. Case studies of Indian startups that successfully pivoted (e.g., Swiggy, Snapdeal).	
UNIT-II	
Customer Discovery (The "Get Out of the Building" Phase)	
09 Hours	
Defining the "Leap of Faith" Assumptions (Value Hypothesis vs. Growth Hypothesis). Who is the customer? (User vs. Buyer vs. Saboteur). Creating Customer Personas. The art of the Customer Interview: How to ask non-leading questions (The "Mom Test" principles). Conducting Problem Interviews to validate customer pain points.	
UNIT-III	
MVP (Minimum Viable Product) Design	
09 Hours	
Concept of MVP: "The smallest thing you can build to learn." Types of MVPs for Indian students: Concierge MVP (Manual service), Wizard of Oz MVP (Fake automation), and Landing Page MVP (Smoke tests). Rapid Prototyping techniques: Paper prototypes, Wireframing tools (Figma/Canva basics), and No-Code tools for validation.	
UNIT-IV	
Validation Metrics & Analytics	
09 Hours	
Vanity Metrics (Downloads, Likes) vs. Actionable Metrics (Engagement, Retention). The Pirate Metrics Framework (AARRR): Acquisition, Activation, Retention, Referral, Revenue. Split Testing (A/B Testing) basics. Cohort Analysis: Tracking specific user groups over time. How to interpret data to decide: Pivot or Persevere?	
UNIT-V	
Business Model & Value Proposition	
09 Hours	
Deep dive into the Business Model Canvas (BMC) – 9 Building Blocks. The Value Proposition Canvas: Mapping "Customer Jobs/Pains/Gains" to "Product Pain Relievers/Gain Creators." Iterating the BMC based on weekly customer feedback (The "Before" and "After" canvas)..	
Course Outcomes: At the end of the course student will be able to	

1.	Knowledge about Lean Startup core concepts, including the types of pivots and the role of an MVP in reducing startup risk.
2.	Understand customer discovery phases to validate hypotheses and create detailed customer personas using primary research.
3.	Gain the skills on designing and building low-fidelity prototypes (Concierge, Wizard of Oz) to test product-market fit.
4.	To acquire the ability to analyze actionable metrics and cohort data to decide whether to pivot or persevere.
5.	To understand the nine building blocks of the Business Model Canvas and refine them through the Value Proposition Design process.

Course Outcomes Mapping with Program Outcomes & PSO

Program Outcomes →	1	2	3	4	5	6	7	8	9	10	11	12	PSO ↓		
	↓ Course Outcomes												1	2	3
ME1255-1.1	3	-	-	-	-	-	-	2	2	-	3	-	-	1	-
ME1255-1.2	3	-	-	-	-	-	-	2	2	-	3	-	-	2	-
ME1255-1.3	3	-	-	-	-	-	-	2	2	-	3	-	-	2	-
ME1255-1.4	3	-	-	-	-	-	-	2	2	-	3	-	-	2	-
ME1255-1.5	3	-	-	-	-	-	-	2	2	-	3	-	-	2	-

1: Low 2: Medium 3: High

TEXTBOOKS:

1. The Lean Startup by Eric Ries (The primary text).

REFERENCE BOOKS:

1. The Mom Test by Rob Fitzpatrick (Crucial for Unit 2 - Interviewing).
2. Running Lean by Ash Maurya (Practical workbook style).
3. Value Proposition Design by Alexander Osterwalder.

NEW PRODUCT DEVELOPMENT

Course Code:	25MBA106	Course Type	PCC
Teaching Hours/Week (L: T: P: S)	3:0:0:0	Credits	03
Total Teaching Hours	45	CIE + SEE Marks	50+50
Teaching Department: Master of Business Administration			
Course Objectives:			

1.	To introduce the fundamental concepts of New Product Development (NPD), focusing on customer perspectives, obsolescence, and the formation of cross-functional NPD teams..
2.	To understand the methods for opportunity identification, uncovering latent customer needs, and applying optimal strategies for concept selection and testing.
3.	To equip students with strategic planning skills in NPD, including the use of Design Thinking, screening criteria, and test marketing strategies.
4.	To gain knowledge on managing new products through demand creation, Intellectual Property (IP) issues, life cycle management, and conjoint analysis.
5.	To know contemporary NPD approaches such as open innovation, crowdsourcing, and agile development while mastering project budgeting and scheduling.
UNIT-I	
Introduction to NPD	
	09 Hours
Introduction- Understanding the concept of Product from the customer perspective, Differences between Product & Service, Need for new product development – Obsolescence, Market Trends, Legal drivers, competition, Business Models for New Products, Elements of Management of New Product development, New Product Development Teams	
UNIT-II	
Opportunity Identification	
	09 Hours
Sources of New Product Ideas – Customers, Competitors, Channel Partners, Approaches to understanding consumer needs, Uncovering latent needs of customers. Applying optimal strategies for developing product solutions, including how to generate concepts using both individuals and groups, methods for getting unstuck, and how to select and test concepts.	
UNIT-III	
NPD Strategies & Testing Periods	
	09 Hours
Strategic Planning for New Product - Generation of ideas - Criteria for screening – need assessment based on secondary and primary research - Concept generation and evaluation – selection, screening, scoring - Concept cycle - concept testing – purpose and procedure. Product testing - Test Marketing, advantages and disadvantages - Test marketing strategies - Commercialization. Design Thinking approach in NPD	
UNIT-IV	
Basics of Managing New Products Management Periods	
	09 Hours
Building Markets and creating demand for new products, Intellectual property issues in new products, New Product Business Plans, Life Cycle Management for new products, Planning for growth in terms of – category and line extensions. Pricing & Promotion for new products. Conjoint Analysis	
UNIT-V	
Contemporary topics in NPD	
	09 Hours
Open innovation; User innovation; Crowd sourcing; Free innovation Continuous innovation and creating a culture of innovation, Agile & concurrent product development approaches.	

NPD Budgeting - Different ways of developing budgets – NPD Project Schedule & budget relationship – Monitoring schedules

Course Outcomes: At the end of the course student will be able to

1.	Knowledge about the drivers for new product development and the organizational structures required for effective NPD management.
2.	Understand how to identify market opportunities and generate product concepts by analyzing customer, competitor, and partner feedback.
3.	Gain the skills on applying Design Thinking and systematic screening processes to evaluate and test product concepts.
4.	To acquire proficiency in managing product life cycles, protecting intellectual property, and planning market extensions.
5.	To understand modern innovation cultures, including agile approaches and the financial management of NPD project schedules.

Course Outcomes Mapping with Program Outcomes & PSO

Program Outcomes→	1	2	3	4	5	6	7	8	9	10	11	12	PSO↓		
	↓ Course Outcomes												1	2	3
ME1256-1.1	3	-	-	-	-	-	-	2	2	-	3	-	-	1	-
ME1256-1.2	3	-	-	-	-	-	-	2	2	-	3	-	-	2	-
ME1256-1.3	3	-	-	-	-	-	-	2	2	-	3	-	-	2	-
ME1256-1.4	3	-	-	-	-	-	-	2	2	-	3	-	-	2	-
ME1256-1.5	3	-	-	-	-	-	-	2	2	-	3	-	-	2	-

1: Low 2: Medium 3: High-

TEXTBOOKS:

1. "Product Management in India", Ramanuj Majumdar 3rd Edition, Prentice Hall Publication

REFERENCE BOOKS:

1. Karl T Ulrich, Steven D. Eppinger and Amita Goyal (2012) "Production design and Development" (5th Edition).
2. Degarmo E.P., Materials and process in Manufacturing, Macmillan Publishing Co., 1997.
3. Heldt P.M., High Speed Combustion Engines, Oxford IBH publishing Co., Calcutta, 1996.
4. Kalpakjian, Manufacturing and Engineering and Technology, Addison Wesley Publishing Company, 1995.