



VARDHAMAN COLLEGE OF ENGINEERING

(AUTONOMOUS)

Affiliated to **JNTUH**, Approved by **AICTE**, Accredited by **NAAC** with **A++** Grade, **ISO 9001:2015** Certified
Kacharam, Shamshabad, Hyderabad - 501218, Telangana, India

www.vardhaman.org

CURRICULUM

For

Bachelor of Technology (Minors)

In

Innovation and Entrepreneurship

Department of MBA

VARDHAMAN COLLEGE OF ENGINEERING, HYDERABAD
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Programme Curriculum Structure
Minors in Innovation and Entrepreneurship

S. No.	Yr/ Sem	Course Code	Course Name	Type	Credits
1	III/I	M1001	Innovation and Design Thinking	Theory	3
2	III/I	M1002	Design Thinking Ideation and Business Plan Development Lab	Practice	2
3	III/II	M1003	Entrepreneurship	Theory	3
4	III/II	M1004	Entrepreneurial Finance and Legal Aspects of Business	Theory	3
5	IV/I	Elective		Theory	3
		M1005	Family Business and Management practices		
		M1006	Start-up Management		
		M1007	MSME Management		
		M1008	Entrepreneurial Marketing		
		M1009	Technology Entrepreneurship		
6	IV/I	M1010	Market Research Lab	Practice	2
7	IV/II	M1011	Mini Project (Either on New Venture Establishment OR Launch of Marketable product OR Patent Publishing)	Project Work	2
Total Credits					18

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Course Structure
M1001 - Innovation and Design Thinking

Hours Per Week			Hours Per Semester			Credits	Assessment Marks		
L	T	P	L	T	P	C	CIE	SEE	Total
3	0	0	42	0	0	3	30	70	100

1. Course Description

Course Overview

The aim of the course is to find out the students flow as well as to identify the customer discovery. The students shall be able to generate the ideas and evaluate it from innovative management models and theories that leads to conceptualize of prototype based on the consumer needs. The Minimum Viable Price (MVP) of the prototype will be tested to understand the acceptability in the market.

Course Pre/co-requisites

This course has no specific prerequisite and co-requisite

2. Course Outcomes (COs)

After the completion of the course, the student will be able to:

- M1001.1. Identify their flow in which they are interested.
- M1001.2. Explore the customer need by adopting innovation and design thinking models.
- M1001.3. Generate the ideas and evaluate with alternate solutions that suits to the customer need.
- M1001 .4. Design and test the prototype based on customer need.

3. Course Syllabus

Theory

Self Discovery: Introduction - Who is your role model? Finding your Flow – Introduction, finding your flow Activity Instructions. Human-centred Innovation and Design – Introduction to Human-centred design, roots of design Thinking, Design thinking as celebration, digital disruption and technology evolution.

Customer Dynamics: Segmentation & Targeting – Introduction, Niche Marketing, Mapping the Consumption Chain, Mapping the Consumption Chain – 17 Qs. Why Customers Won't Buy – Introduction, Why Customers Won't Buy – Switching Cost, Why Customers Won't Buy – Psychological Biases, Customer Reluctance, Class Activity: What's the Alternative? Introduction and Activity Instructions and Activity.

Innovation Management Models and Theories: Introduction, Innovation matrix – Radical or Breakthrough, Incremental or Basic, Disruptive and Sustaining. Doblin Innovation framework – Business Innovation, Technology or Product Innovation, Marketing Innovation. Theories of Innovation – The Innovator's dilemma, The Technology Adoption

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Lifecycle, Jobs-to-be-done framework, The 3 Horizons, The 70-20-10.

Idea Generation and Idea Evaluation: D.I.S.T.R.U.P.T Model for Ideation. Mind Mapping for Ideas – Mind Mapping for Ideas, Activity Instructions on Let's Create a Mind Map. Brainstorm – Activity Instructions on Let's Brainstorm. IDEA EVALUATION - Decision Matrix Analysis – Concept and Introduction, Decision Making Analysis – An Example, Decision Matrix Analysis – Activity Instructions. Paired Comparison Analysis - Concept and Introduction, Paired Comparison Analysis – Activity Instructions. 5 Q Framework - The 5Questions Framework.

Prototyping and Testing: What is Prototyping? Minimum Value Proposition: Introduction, Customer Segment and Value Proposition Design, Value Proposition and Assessing Fit – Example, Class Activity: Value Proposition and Assessing Fit – Activity Instructions, Activity and Activity Debrief, Value Proposition Canvas, Refine Your Value Proposition. What is Prototyping? How to Build a Prototype.

4. Books and Materials

Text Books:

1. Satell, Greg. Mapping innovation: a playbook for navigating a disruptive age. New York, NY: McGraw-Hill Education, 2017.
2. Michael G. Luchs K. Scott Swan Abbie Griffin, Design Thinking New Product Development Essentials from the PDMA, Wiley, 2015.

Reference Books/ Research Articles:

1. Michael Lewrick, Patrick Link, Larry Liefer, The Design Thinking Playbook, John Wiley & Sons, 2018.
2. Christensen, Clayton M. The innovator's dilemma: when new technologies cause great firms to fail. Harvard Business Review Press, 2013.
3. Moore, Geoffrey A., and Regis McKenna. Crossing the chasm. 1999.
4. Christensen, Clayton M., et al. "Know your customers' jobs to be done." Harvard Business Review 94.9 (2016): 54-62.
5. Johnson, Samantha J., Deborah A. Blackman, and Fiona Buick. "The 70: 20: 10 framework and the transfer of learning." Human Resource Development Quarterly 29.4 (2018): 383-402.
6. Datar, S & Chaturvedi S., BMVSS: Changing Lives, One Jaipur Limb at a Time. Harvard Business, 2013.
7. Srikant M. Datar, Amram Migdal, Paul Hamilton, IBM: Design Thinking, Harvard Business, 2021.

Reference Link:

1. WFEN 101 'Basic Program in Entrepreneurship', Retrieved from www.Learnwise.org, Wadhvani Foundation, 2018.

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Course Structure

M1002 - Design Thinking, Ideation and Business Plan Development Lab

Hours Per Week			Hours Per Semester			Credits	Assessment Marks		
L	T	P	L	T	P	C	CIE	SEE	Total
0	0	4	0	0	56	2	30	70	100

1. Course Description

Course Overview

The students shall be able to out the students flow as well as to identify the customer discovery. They generate the ideas and evaluate it from innovative management models and theories that leads to conceptualize of prototype based on the consumer needs. The Minimum Viable Price (MVP) of the prototype will be tested to understand the acceptability in the market.

Course Pre/co-requisites

This course has no specific prerequisite and co-requisite

2. Course Outcomes (COs)

After the completion of the course, the student will be able to:

- M1002.1. Identify their flow in which they are interested.
- M1002.2. Explores the customer needs through idea generation with references.
- M1002.3. Evaluate the ideas with alternate solutions to the opportunities identified.
- M1002.4. Design and test the prototype as per the idea generated focused on need of the customer/target audience.

3. Course Syllabus

Practice

1. Activity on finding your flow and debriefing.
2. Class Activity: Find Your Niche
3. Assignment: Drawing the Consumption Map.
4. Brainstorm on DISRUPT concept and Let's ID8.
5. Activity on Mind Mapping and debriefing
6. Activity on Group discussions and idea presentations/demonstrations & debriefing
7. Assignment – Idea Bank
8. Activity on Decision Matrix Analysis and debriefing.
9. Activity on Paired Comparison Analysis and debriefing.
10. Class Activity - Apply 5Q Framework and debriefing.
11. Activity on Value Proposition Design
12. Activity Value Proposition and Assessing Fit
13. Conduction of Workshop/Seminar

4. Laboratory Equipment/Software/Tools Required

1. Requires system with Ms-office
2. Relevant case study Material and activity printouts

5. Books and Materials

Text Books:

1. Satell, Greg. Mapping innovation: a playbook for navigating a disruptive age. New York, NY: McGraw-Hill Education, 2017.
2. Michael G. Luchs K. Scott Swan Abbie Griffin, Design Thinking New Product Development Essentials from the PDMA, Wiley, 2015.

Reference Books/ Research Articles:

1. Michael Lewrick, Patrick Link, Larry Liefer, The Design Thinking Playbook, John Wiley & Sons, 2018.
2. Christensen, Clayton M. The innovator's dilemma: when new technologies cause great firms to fail. Harvard Business Review Press, 2013.
3. Moore, Geoffrey A., and Regis McKenna. Crossing the chasm. 1999.
4. Christensen, Clayton M., et al. "Know your customers' jobs to be done." Harvard Business Review 94.9 (2016): 54-62.
5. Johnson, Samantha J., Deborah A. Blackman, and Fiona Buick. "The 70: 20: 10 framework and the transfer of learning." Human Resource Development Quarterly 29.4 (2018): 383-402.
6. Datar, S & Chaturvedi S., BMVSS: Changing Lives, One Jaipur Limb at a Time. Harvard Business, 2013.
7. Srikant M. Datar, Amram Migdal, Paul Hamilton, IBM: Design Thinking, Harvard Business, 2021.

Reference Link:

1. WFEN 101 'Basic Program in Entrepreneurship', Retrieved from www.Learnwise.org, Wadhwani Foundation, 2018.

Reference to case studies:

1. BMVSS: Changing Lives, One Jaipur Limb at a Time.
2. Case Study: Disruptive technology
3. Case Study: Theories of Innovation
4. IBM: Design Thinking

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Course Structure
M1003 - Entrepreneurship

Hours Per Week			Hours Per Semester			Credits	Assessment Marks		
L	T	P	L	T	P	C	CIE	SEE	Total
3	0	0	42	0	0	3	30	70	100

1. Course Description

Course Overview

This course has been designed to prepare the students to learn the skills required for entrepreneurship. Entrepreneurship differs from ordinary courses and requires a different skill set. Therefore, the course is prepared to cater the needs of students in developing their entrepreneurial skills of business. It focuses on role, characteristics, qualities and functions of entrepreneur; business ethics and corporate governance; role, importance and challenges of business plan; Trademarks, steps in registration of Trademarks and reasons refusal of Trademarks; structure of business firm and government support for startups. The classes will be theory and also activity based.

Course Pre/co-requisites

Innovation and Design Thinking

2. Course Outcomes (COs)

After the completion of the course, the student will be able to:

- M1003.1. Analyze the role, characteristics, qualities and functions of entrepreneur.
- M1003.2. Apply business ethics and corporate governance for setting up a business enterprise.
- M1003.3. Evaluate the role, importance and challenges of business plan.
- M1003.4. Infer the concept of Trademarks, steps in registration of Trademarks and reasons for refusal of Trademarks.
- M1003.5. Analyze the structure of business firm and government support for startups.

3. Course Syllabus

Theory

Introduction to Entrepreneurship: Concept of Entrepreneurship – Definition – Meaning – Types – Qualities of an Entrepreneur – Classification of Entrepreneurs – Factors influencing Entrepreneurship – Role of Entrepreneurs in nation building- Women entrepreneurs – challenges and growth.

Business Ethics and Corporate Governance: Business Ethics –Meaning, Principles of Business Ethics, Characteristics of Ethical Organization. Corporate Governance- Meaning, Governance vs. Good Corporate Governance, Regulatory Framework of Corporate Governance in India, Corporate Social Responsibility.

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Business Plan: Meaning and importance of business plan, Preparation of Business Plan, Feasibility study Marketing, Finance, Technology & Legal Formalities.

Trademarks: History of trademarks-Significance of trademarks- Trade mark law-Kinds of trademarks-Registration of trademarks-Reasons for refusal of trademarks.

Structure of business firm: Sole proprietorship; partnership; limited liability partnership, corporation. Start-ups, support of government for startups. Family Businesses – concept, structure and types.

4. Books and Materials

Text Books:

1. Dr. Khanka, revised edition , Entrepreneurial Development, Sultan Chand & Co.Ltd., New Delhi, 2012.
2. Bholanath Datta, Entrepreneurship, Excel publications, India, 2009.
3. P. Sharma, Corporate Governance, Business Ethics & CSR, Ane Books Pvt. Ltd., New Delhi.

Reference Books:

1. Gersick, K. E., Davis, J. A., Hampton, M. M., & Lansberg, I. Generation to generation: Life cycles of the family business. Boston: Harvard Business School Press, 1997.
2. Kaplan, J. Patterns of entrepreneurship. Wiley, 2004.
3. Holt, D. H. Entrepreneurship new venture creation. New Delhi: Prentice Hall of India, 2004.
4. Kotler, Philip. Marketing Management : Prentice Hall, 2000
5. Brian C. Reid, A Practical Guide to Patent Law, 2nd Edition.

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Course Structure

M1004 - Entrepreneurial Finance and Legal Aspects of Business

Hours Per Week			Hours Per Semester			Credits	Assessment Marks		
L	T	P	L	T	P	C	CIE	SEE	Total
3	0	0	42	0	0	3	30	70	100

1. Course Description

Course Overview

This course addresses the concepts and principles of entrepreneurial finance and legal aspects of business. It covers the fundamentals of finance and its various aspects, legal and ethical framework of business. Contracts, negotiable instruments, indirect tax and the court systems are examined. Upon completion the student should be able to identify legal and ethical issues that arise in business decisions and the laws that apply to them.

Course Pre/co-requisites

This course has no specific prerequisite and co-requisite

2. Course Outcomes (COs)

After the completion of the course, the student will be able to:

- M1004.1. Examine the overall role and importance of the finance in the business.
- M1004.2. Evaluate the management of company affairs.
- M1004.3. Apply laws for unfair trade practices to avoid legal actions.
- M1004.4. Interpret the rules regarding negotiable instruments for exchange of goods and services.

3. Course Syllabus

Theory

Financial Management: An Overview, The Finance Function: Nature and Scope; Evolution of finance function – Its new role in the contemporary scenario -Goals of finance function – maximizing vs. satisfying; Profit vs. Wealth vs. Welfare; the Agency relationship and costs. Analysis and interpretation of financial statements-Horizontal Analysis, Vertical Analysis and trend analysis of company.

Financial Institutions & Sources: Structure of Financial Institutions, Commercial banks- District Industries Centre – National Small Industries Corporation – Small industries Development Organisation- All India Financial Institutions, Methods and sources of raising finance.

Companies Act, 2013: Steps and procedure for incorporation of the company, Appointment of Directors, Powers, duties, & liabilities of Directors, Company Meetings, Resolutions, Winding-up of a Company.

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Law of Contract: Nature of Contract and Essential elements of valid contract, Offer and Acceptance, Consideration, Capacity to contract and Free Consent, Legality of Object. Unlawful and illegal agreements, discharge of Contracts, Remedies for breach of contract.

Negotiable Instruments Act - 1881: Negotiable Instruments- Promissory Note, Bills of Exchange, & Cheque, and their definitions and characteristics, Types of endorsements, Holder- Holder in due course, Discharge of Parties. Basics of Goods and Services Tax (GST).

4. Books and Materials

Text Books:

1. I M Pandey, Financial Management, 11 e, Vikas Publications , 2015
2. Paresh Shah, Basic Financial Accounting for Management, Oxford University Press, New Delhi, 2014.
3. Ravinder Kumar, Legal Aspects of Business, 4e, Cengage Learning, 2016.
4. P.P.S. Gogna, Company Law, S.Chand, 2016.

Reference Books:

1. RSN Pillai, Bagavathi, Legal Aspects of Business, S.Chand, 2016.
2. Akhileshwar Pathak , Legal Aspects of Business, Tata McGraw Hill, 3e, 2011.

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Course Structure
M1005 - Family Business and Management practices

Hours Per Week			Hours Per Semester			Credits	Assessment Marks		
L	T	P	L	T	P	C	CIE	SEE	Total
3	0	0	42	0	0	3	30	70	100

1. Course Description

Course Overview

The subject introduces with the uniqueness of developing the family business value system, culture and facing its structure complexities. It details the versatile build up models on the system. It explains how firms has to maintain corporate governance, emphasizes on adaptation of changes in family business to transform, generate value creation, manage conflicts and understand the concept of succession planning management.

Course Pre/co-requisites

This course has no specific prerequisite and co-requisite.

2. Course Outcomes (COs)

After the completion of the course, the student will be able to:

- M1005.1. Explain the dynamics of family business to analyse the complexities of family business.
- M1005.2. Application of the various family business models to enhance the motive of family business as a thought process.
- M1005.3. Apply the professional business management tactics for better governance.
- M1005.4. Analyse and adapt the changes in the role of family managers to meet the competencies
- M1005.5. Examine the conflict management and explain the critics of succession management in the family business.

3. Course Syllabus

Theory

Family Business Management – Basics: Uniqueness & Dynamics – People, Women in Family Business, Systems & Life Cycles - Structural Management of the Family Business -Family Complexity, Culture and Value Systems -Business Complexity -Effects of Complexity on the Family Business Structure

Family Business Models: Captain Model, Emperor Model, Family Team Model, Professional Family Model, Corporation Model -Family Investment Group (FIG) Model- Mindset and Structure: How Thoughts Influence Deeds?

Professional Management of Family Business: Non-family Managers - Non-Executive Directors -Professional Advisors & Consultants- The role of balanced board of directors- Family Constitution for better management-Family Governance in multi generational

family firms.

Adaptation of change in Family Business: Change and adaptation in family business - Trans-generational value creation - Changing roles of family members, Social Structure in family Business - Interpersonal dynamics in family business.

Conflict Management and Succession Planning: Justice Perceptions- Types of conflicts - Conflict dynamics and conflict management strategies -Succession Planning and Objectives - Choosing the Right Ownership Structure -Promoting Stewardship -Getting help from Board of Directors Management Succession: Management Succession Issues - Employment of Family Members - Grooming Family Managers to be Successors - Managing Family Disagreements - Integrating the Family Component in Business Planning - Developing Successors- From Second to Third Generations Transferring Control and Ownership

4. Books and Materials

Text Books:

1. Thomas Zellweger, Managing the Family Business: Theory and Practice, Edward Elgar Publishing Ltd, 2017.
2. Family Businesses: The Essentials, Main edition, Profile Books 2007.

Reference Books:

1. Harvard Business Review Family Business Handbook: How to Build and Sustain a Successful, Enduring Enterprise, Harvard Business Review Press, 2021.
2. Mark Fischetti, The Family Business Succession Handbook, Family business magazine, 1997.
3. Family Business Models: Practical Solutions for the Family Business, Palgrave Macmillan Main Edition, 2010.

Resources and Activities:

1. Case Studies.
2. Role Plays
3. Audio Visuals
4. Assignments and Presentations

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Course Structure
M1006 - Startup Management

Hours Per Week			Hours Per Semester			Credits	Assessment Marks		
L	T	P	L	T	P	C	CIE	SEE	Total
3	0	0	42	0	0	3	30	70	100

1. Course Description

Course Overview

Entrepreneurship is a structure build by an entrepreneur with enormous and unique ideas, who is willing to take risk. In simple words, someone who enthusiastic to engage themselves into business with a goal of profit and welfare of the economy. Startup Management is a daily destination where entrepreneurs learn about managing, growing and scaling startups, basically helps the entrepreneur in constantly growing and acknowledging the real aspects of business in today's world.

Course Pre/co-requisites

This course has no specific prerequisite and co-requisite

2. Course Outcomes (COs)

After the completion of the course, the student will be able to:

- M1006.1. Examine the risks and obstacles involved in the business in this dynamic business environment.
- M1006.2. Develop a clear vision for Start-Up as an entrepreneur.
- M1006.3. Analyze capital and legal environment while planning the business goals (short-term and long term).
- M1006.4. Evaluate strategic execution of business plans in competitive market.

3. Course Syllabus

Theory

Startup opportunities: Liberalization, Privatization and Globalization (LPG) concept – The Big Idea- Generate Ideas with Brainstorming- Business Startup - Ideation- Venture Choices - The Rise of The startup Economy - The Six Forces of Change- The Startup Equation- The Entrepreneurial Ecosystem –Entrepreneurship in India. Government Initiatives.

Startup Capital Requirements and Legal Environment: Identifying Startup capital Resource requirements - estimating Startup cash requirements - Develop financial assumptions- Constructing a Process Map - Positioning the venture in the value chain - Launch strategy to reduce risks- Startup financing metrics - The Legal Environment- Approval for New Ventures- Taxes or duties payable for new ventures.

Startup Financial Issues: Feasibility Analysis - The cost and process of raising capital - Unique funding issues of a high-tech ventures - Funding with Equity – Financing with

Debt- Funding startups with bootstrapping- crowd funding- strategic alliances.

Startup Survival and Growth: Growing with the market - Growing within the industry- Venture life patterns- Reasons for new venture failures- Scaling Ventures preparing for change - Leadership succession. Support for growth and sustainability of the venture.

Planning for Harvest and Exit: Dealing with Failure: Bankruptcy, Exit Strategies- Selling the business - Cashing out but staying in-being acquired- Going Public (IPO) – Liquidation.

4. Books and Materials

Text Books:

1. Kathleen R Allen, Launching New Ventures, An Entrepreneurial Approach, Cengage Learning, 2016.
2. Anjan Raichaudhuri, Managing New Ventures Concepts and Cases, Prentice Hall International, 2010.

Reference Books:

1. S. R. Bhowmik & M. Bhowmik, Entrepreneurship, New Age International, 2007.
2. Steven Fisher, Ja-nae' Duane, The Startup Equation -A Visual Guidebook for Building Your Startup, Indian Edition, Mc Graw Hill Education India Pvt. Ltd, 2016.
3. Donald F Kuratko, Jeffrey S. Hornsby, New Venture Management: The Entrepreneur's Road Map, 2e, Routledge, 2017.
4. Vijay Sathe, Corporate Entrepreneurship, 1e, Cambridge, 2009.

Resources and Activities:

1. Mentoring by Industry experts and Identifying buddies.
2. Industry interaction.

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Course Structure
M1007 - MSME Management

Hours Per Week			Hours Per Semester			Credits	Assessment Marks		
L	T	P	L	T	P	C	CIE	SEE	Total
3	0	0	42	0	0	3	30	70	100

1. Course Description

Course Overview

This course has been designed to prepare the students to learn the skills required for Micro Small and Medium Enterprises (MSME) development. Therefore, the course is prepared to cater the needs of students in developing their entrepreneurial skills of Micro Small and Medium Enterprises (MSME). It focuses on the role of MSME in India, Employment and export opportunities in MSME, challenges of MSME; problems of Micro Small and Medium Enterprises and government support for Micro Small and Medium Enterprises; role and importance of Institutions Supporting the Micro Small and Medium Enterprises; concept of production, finance, marketing, human resources in Micro Small and Medium Enterprises; Global Opportunities for Micro Small and Medium Enterprises and Role of Women SHGs in Micro Enterprises. The classes will be theory and also activity based.

Course Pre/co-requisites

This course has no specific prerequisite and co-requisite

2. Course Outcomes (COs)

After the completion of the course, the student will be able to:

- M1007.1. Identify the role of MSMEs in India.
- M1007.2. Appraise the Government support towards the challenges of MSMEs.
- M1007.3. Evaluate the concept of production, finance, marketing, human resources in Micro Small and Medium Enterprises.
- M1007.4. Analyze Global Opportunities for Micro Small and Medium Enterprises.

3. Course Syllabus

Theory

Basics of Micro Small and Medium Enterprises: Concept, Definition and Role of Micro Small and Medium Enterprises in the modern Indian Economy- Micro Small and Medium Enterprises in India, Employment and export opportunities in Micro Small and Medium Enterprises - challenges of Micro Small and Medium Enterprises.

Dynamics of Micro Small and Medium Enterprises: Government Policy and Development of Micro Small and Medium Enterprises – Growth and Performance –Reservation of items for Micro Small and Medium Enterprises – Problems of Micro Small and Medium Enterprises – Sickness of Micro Small and Medium Enterprises.

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Institutions Supporting Micro Small and Medium Enterprises: Central, State and Other Institutional Support for Micro Small and Medium Enterprises – Technological Upgradation and Institutional facility for Micro Small and Medium Enterprises – Incentives and Subsidies for Micro Small and Medium Enterprises.

Management of Micro Small and Medium Enterprises: Production, Finance, Marketing, Human resources in Micro Small and Medium Enterprises and Office Management in Small Business Enterprises.

Global Opportunities for Micro Small and Medium Enterprises: Micro Small and Medium Enterprises in International Business – Export Documents and Procedures for Micro Small and Medium Enterprises – E-commerce and Small Enterprises. Role of Women SHGs, SEZ and Export oriented Units (EOU) in Micro Enterprises.

4. Books and Materials

Text Books:

1. Suman Kalyan Chaudhury, Micro Small and Medium Enterprises in India, Raj Publications, 2013.
2. Barrow C. The Essence of Small Business, Prentice Hall of India, New Delhi, 1997.
3. Bedapatai Mohanty, Economics of Small Scale Industries, Ashish, New Delhi, 1986
4. Charantimath P.M., Entrepreneurship Development and Small Business Enterprises, Pearson Education, New Delhi, 2006.

Reference Books:

1. Desai M., Industrial Economy of India, Himalaya Publishers, New Delhi, 1968.
2. Aneet Monika Agarwal, Small and medium enterprises in transitional economies, challenges and opportunities, DEEP and DEEP Publications.
3. Gopal Swaroop, Advances to Small Industries and Small Borrowers, Sultan Chand, New Delhi, 1986. ition, Mc Graw Hill Education India Pvt. Ltd, 2016.
4. Khanka S.S. (2001): Entrepreneurial Development, S.Chand & Co., New Delhi, 2001.

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Course Structure
M1008 - Entrepreneurial Marketing

Hours Per Week			Hours Per Semester			Credits	Assessment Marks		
L	T	P	L	T	P	C	CIE	SEE	Total
3	0	0	42	0	0	3	30	70	100

1. Course Description

Course Overview

This course is about the marketing challenges in an entrepreneurial firm. Entrepreneurship is the discovery, enactment and pursuit of new business opportunities. Successful execution of an entrepreneurial idea requires a sound marketing plan. In this course, we will investigate how marketing tools can enable entrepreneurs to realize the full potential of their ideas.

Course Pre/co-requisites

This course has no specific prerequisite and co-requisite

2. Course Outcomes (COs)

After the completion of the course, the student will be able to:

- M1008.1. Identify the role of marketing innovations for entrepreneur.
- M1008.2. Apply basic marketing concepts in entrepreneurial settings
- M1008.3. Develop a marketing plan for an entrepreneurial idea.
- M1008.4. Identify distribution Channels for new ventures.
- M1008.5. Solve the problem of “newness” as you develop the marketing plan .

3. Course Syllabus

Theory

Introduction: Introduction to New Venture Planning, sustaining competitive advantages of New ventures, five forces of industry competitiveness. Role of Marketing and its importance- feasibility tests- market feasibility tests and reports. Role of marketing innovations for entrepreneurs, cooperative marketing in rural areas.

Initiating Marketing planning: Market research and its importance – research objectives & methodology, Qualitative data and quantitative data- primary & secondary data gathering- arrangement, and data analysis- preparation of marketing research report. Demand forecasting and its perils. Forecasting sales of innovative product/service, Survey-based forecasting & Model-based forecasting. Rural and international market demand forecasting. Overcoming financial, operational and organizational hurdles

Product development and pricing for New Venture: Product concept development, Product Segmentation, Targeting, Positioning in new venture. Pricing in new ventures- Price determination of new innovative products-cost and value based pricing, behavioral pricing. Application of pricing strategies like bundle, segment, product line,

menu pricing and measuring the consumer's willingness to pay. International pricing.

Distribution Channels for new ventures: Understanding Channels, Channel Options- Owned, Earned, Paid, Channel Drivers. Choosing a Channel Strategy, Three Channel Design imperatives. Formalized Channel Arrangement. Supply Chain Management.

Promotion for new ventures: Promotional strategies for new ventures using No-Money Marketing techniques. Promotional tools in New venture growth such as: Advertisement, Sales promotion, publicity, direct marketing, personal selling. Role of Integrated Marketing Communication in New venture. Importance of networking socially and trade association wise, word of mouth. Role of Digital Marketing, Guerrilla marketing, Buzz marketing, viral marketing in emerging businesses.

4. Books and Materials

Text Books:

1. Holt, David, Entrepreneurship New Venture Creation, Fourth Edition, PHI, 2016
2. Hisrich Peters, Entrepreneurship Fourth Edition, Tata Ma Graw Hill, 2018
3. Lodish , Morgan and Archambeau, Marketing that works, Pearson Education, 2016.

Reference Books:

1. Baker, M.J., Marketing Strategy and Management, 3rd Edition, Macmillan, 2000
2. Best, R.J. , Market-Based Management: Strategies for Growing Customer Value and Profitability, 4th ed International Edition, Pearson Prentice Hall, 2005
3. Brassington & Pettitt, Principles of Marketing, 3rd edition, 2003
4. Bjerke, B. and Hultman, C.M., Entrepreneurial Marketing, Edward Elgar, 2002
5. Morgan , H.L., A. Kallianpur, and L.M. Lodish, “ Entrepreneurial Marketing”, lessons from Wharton's pioneering MBA course.
6. Marketing for Entrepreneurs, 2nd Edition Frederick G. Crane 2013 Edition SAGE Publications, Inc. ISBN-13#: 978-1-4522-3004.

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Course Structure
M1009 - Technology Entrepreneurship

Hours Per Week			Hours Per Semester			Credits	Assessment Marks		
L	T	P	L	T	P	C	CIE	SEE	Total
3	0	0	42	0	0	3	30	70	100

1. Course Description

Course Overview

This course helps the student in identifying technological entrepreneurial opportunities and entrepreneurial infrastructure. This course facilitates the student on technology assessment, technology diffusion and technology ventures in global context. Student acquires skills on exit strategies for technology ventures in domestic and global context.

Course Pre/co-requisites

This course has no specific prerequisite and co-requisite.

2. Course Outcomes (COs)

After the completion of the course, the student will be able to:

- M1009.1. Identify technological entrepreneurs in business environment.
- M1009.2. Evaluate the evolution of technology and strategic innovations.
- M1009.3. Interprets the diffusion made in technology.
- M1009.4. Identifies technology ventures in global context.
- M1009.5. Analyze the exit strategies for technology ventures.

3. Course Syllabus

Theory

Evolution of Technology: Effects of New Technology- Technology Innovation- Invention, Innovation, Diffusion, Revolutionary and Evolutionary Innovation- Product and Process Innovation- Strategic Implications of Technology- Technology - Strategy Alliance- Convergent and Divergent Cycle- The Balanced Approach. Technology Assessment: Technology Choice- Technological Leadership and Followership- Technology Acquisition- Technological Forecasting- Exploratory, Intuitive, Extrapolation, Growth Curves.

Entrepreneurial Technology assessment: Entrepreneurship definition, Technology entrepreneurship, a comparison of entrepreneurial processes. Entrepreneurial Infrastructure – Inputs and Outputs within the technological entrepreneurship ecosystem. Technological Entrepreneurs - Character Traits – Vision, Opportunity Orientation, Foresight, Collaborative Orientation, Entrepreneurial Self-efficacy.

Diffusion of Technology: Rate of Diffusion; Innovation Time and Innovation Cost-Speed of Diffusion- Technology Indicators- Various Indicators- Organizational Implications of Technology- Relationship between Technical Structure and Organizational

Infrastructure- Flexible Manufacturing Management System (FMMS).

Technology Ventures in a Global Context: Globalization and technology ventures – Technology venture drivers, capital intensity, knowledge intensity, accelerated pace of change, the network effect. Value creation in the global economy – Creating market value, creating enterprise value, value creation in technology ventures. Value capture in the global economy – capturing market value, capturing enterprise value. Global market entry strategies – Exporting, licensing, Joint ventures, strategic alliances, trading companies, counter trading, direct ownership.

Exit Strategies for Technology Ventures and Human Aspects in Technology Management: Acquisition – Due diligence, the acquisition deal. Mergers, Venture valuation, Going Public – advantages of going public, disadvantages of going public, timing, underwriter selection, registration statement and timetable, the prospectus, the red herring, reporting requirements. Human Aspects in Technology Management- Integration of People and Technology- Organizational and Psychological Factors- Organizational Outcome- Technology Transfer-Technology Management Scenario in India.

4. Books and Materials

Text Books:

1. Ian Chaston, Technological Entrepreneurship: Technology-Driven vs Market-Driven Innovation, Palgrave Macmillan, 1st ed., 2017.
2. Tarek Khalil: Management of Technology, McGraw Hill International, 2000.
3. Thomas N. Duening, Robert D. Hisrich, and Michael A. Lechter, Technology Entrepreneurship – creating, capturing and protecting value, Academic Press, 2010

Reference Books:

1. Rohtagi P K, Rohtagi K and Bowonder B: Technological Forecasting, Tata McGraw Hill, New Delhi.
2. Sharif Nawaz: Management of Technology Transfer & Development, APCFT, Bangalore, 1983.
3. Betz Fredrick: Managing Technology, Prentice Hall, New Jersey.
4. Gaynor: Handbook of Technology Management, McGraw Hill.

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Course Structure
M1010 - Market Research Lab

Hours Per Week			Hours Per Semester			Credits	Assessment Marks		
L	T	P	L	T	P	C	CIE	SEE	Total
0	0	4	0	0	56	2	30	70	100

1. Course Description

Course Overview

This course introduces the core principles and techniques required in market research. This course focuses on Data cleansing, Description of sample data, Hypothesis testing, Sales analysis and forecasting, and Data citation Rules: American Psychological Association -APA and IEEE.

Course Pre/co-requisites

This course has no specific prerequisite and co-requisite

2. Course Outcomes (COs)

After the completion of the course, the student will be able to:

- M1010.1. Apply the data cleansing techniques through Microsoft Excel.
- M1010.2. Evaluate the Consumer behavior with mean median and mode, range, variance, standard deviation.
- M1010.3. Explore the testing of hypothesis on Consumer behavior with t-test and its variant.
- M1010.4. Apply the moving averages, exponential smoothing and regression analysis-simple and multiple for sales analysis and forecasting.
- M1010.5. Analyze the data citation Rules: American Psychological Association -APA and IEEE.

3. Course Syllabus

Practice: Marketing Research Using Microsoft Excel:

- 1. Sample data of Consumer behaviour-Data cleansing
 - A. Remove Duplicates.
 - B. Data Parsing from Text to Column.
 - C. Delete All Formatting.
 - D. Spell Check.
 - E. Change Case - Lower/Upper/Proper.
 - F. Highlight Errors.
 - G. TRIM Function.
- 2. Description of Consumer Behaviour.
 - A. Mean Median and Mode.
 - B. Range, Variance, Standard deviation.
- 3. Testing the assumptions of Consumer Behaviour.
 - A. One sample t-test

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- B. Independent sample t-test
- C. Paired sample t-test
- D. ANOVA
- 4. Sales analysis and forecasting
 - A. Moving averages.
 - B. Exponential Smoothing.
 - C. Regression analysis- Simple and Multiple
- 5. Data citation Rules: American Psychological Association -APA and IEEE

4. Laboratory Equipment/Software/Tools Required

- 1. Ms-Office

5. Books and Materials

Text Books:

- 1. Wayne L. Winston, Microsoft Excel Data Analysis and Business Modeling, Pearson Education , 2004.
- 2. Denise Etheridge, Excel Data Analysis: Your Visual Blueprint for Creating and Analyzing Data, Charts and Pivot Tables, Wiley, 2010.
- 3. Mark Harmon, Hypothesis Testing in Excel - The Excel Statistical Master, Excel Master Series, 2011.

Reference Books:

- 1. Naresh K. Malhotra and Satyabhusan Das, Marketing Research, Pearson, 2019.
- 2. C.R. Kothari and Gaurav Garg, Research Methodology, New age International Publishers, 2004.
- 3. D.R. Cooper & P.S. Schindler, Business research Methods, McGraw-Hill, 2006.