Dr. Babasaheb Ambedkar Technological University, Lonere

Dr. Babasaheb Ambedkar Technological University
(Established as a University of Technology in the State of Maharashtra)
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Structure and Detailed Syllabus for UG Degree

Minor in Innovation and Entrepreneurship

In line with National Education Policy 2020

(Effective from Academic year 2024-25 for University campus only)

List of Courses for Minor in Innovation and Entrepreneurship

Sr.no.	Course Title	Credits
1	Introduction to Entrepreneurship	3
2	Entrepreneurial Economics	3
3	Marketing Research	3
4	Idea Generation and Validation	3
5	New Venture Establishment	3
6	Pricing Management	3
7	Innovation and Entrepreneurship	2
	Total	20

Introduction to Entrepreneurship

Course Learning Outcomes:

After successful completion of the course, students will be able to;

- 1. Analyze the DNA of an entrepreneur and assess their strengths and weaknesses from an entrepreneurial perspective.
- 2. Apply leadership principles in various forms of business organizations.
- 3. Connect entrepreneurial principles to non-profit, government and larger corporate organizations.
- 4. Analyze common early stage pitfalls and design measures of control.
- 5. Design value propositions for the products and services.

Course C	ontent	
Unit No.	Description	Hrs.
1.	Introduction to Entrepreneurship:	07
	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, entrepreneurial success	
	stories	
2.	Leadership, motivation & power:	07
	Leadership, 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 are most persuasive to influence others. organizational systems	
	and conventionally used management paradigms	
3.	Effectual Entrepreneurship:	07
	Effectual reasoning — problem and process, principles of effectual	
	reasoning- 3 Pilot in the plane principle, The affordable loss principle,	
	principles of entrepreneurial expertise- The bird-in-hand principle, The	
4	crazy quilt principle, The lemonade principle, Lean Startup Principle	07
4.	Value Proposition:	07
	Introduction, tools and process of value proposition design, assessing value	
	proposition design skills. Value propositions for new ventures and existing businesses.	
5.	Value Canvas:	07
3.	Value map, customer profile- jobs, pains, gains and their ranking, Mapping	07
	the Value Proposition of Value Proposition Design, the value map and fit.	
6.	Business Organizations:	07
0.	Introduction to various forms of business organization (sole proprietorship,	07
	partnership, corporations, Limited Liability company), mission, vision and	
	parties in p, corporations, Entitled Elability company), illission, vision and	

strategy formulation.

References

Text Book:

- Nielsen, S. L., Klyver, K., Evald, M. R., & Bager, T. Entrepreneurship in theory and practice: paradoxes in play, Edward Elgar Publishing, Cheltenham, UK.
- Alexander Osterwalder, Yves Pigneur, Gregory Bernarda, Value Proposition Design-How to Create Products and Services Customers want, Alan Smith, Wiley Publications.

- Eric Ries, The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses
- Chip Heath, Dan Heath, Made to Stick: Why Some Ideas Survive and Others Die
- Steve Blank and Bob Dorf , The Startup Owner's Manual: The Step-By-Step Guide for Building a Great Company
- W. Chan Kim, Renée Mauborgne, Blue Ocean Strategy
- Guy Kawasaki, The Art of the Start: The Time-Tested, Battle-Hardened Guide for Anyone Starting Anything
- Clayton M. Christensen, The Innovator's Dilemma: The Revolutionary Book that Will Change the Way You Do Business

Entrepreneurial Economics

Course Learning Outcomes:

After successful completion of the course, students will be able to,

- 1. Evaluate the concepts and analytical tools from micro economic theory that are useful for Entrepreneurs in making decisions at the firm level.
- 2. Identify the competitive relationship between demand and supply.
- 3. Evaluate the microeconomic variables of production function and role in decision making.
- 4. Identify the issues related to markets and selection of best alternatives to maximize the profit.
- 5. Analyze the role of International trade and sectorial development.

Course C	ontent	
Unit No.	Description	Hrs.
1.	Microeconomics:	07
	Origin of economics relationship to functional areas of business,	
	Managerial Economics meaning, nature and scope, Managerial economics	
	and business decision making, Decision making in risk and uncertainty,	
	Role of managerial economist, Fundamental concepts of Managerial	
	Economics	
2.	Demand and Supply Analysis:	07
	Demand analysis meaning, determinants and types of demand, Elasticity of	
	demand, Law of diminishing marginal utility meaning and determinants,	
	Demand estimation and forecasting, Supply Analysis, Concept, Theory and	
	Law Factors affecting supply	
3.	Production Functions:	07
	Production decisions production functions, Isoquants, Expansion path,	
	Cobb Douglas function. Theory of production, Production with one variable	
	input, Production with two variable inputs, Marginal rate of substitution,	
	Law of return to scale, Short run and long run analysis of production,	
	revenue analysis, break even analysis.	
4.	Pricing Decisions and Profit Planning:	07
	Pricing and output decisions methods of pricing differential pricing	
	government intervention and pricing. Pro: if meaning and nature, profit	
	policies, profit planning and forecasting, cost volume profit analysis,	
	investment analysis. Cost Concepts, cost output relationship, Economies	
	and diseconomies of scale cost function.	
5.	Theory of Market and Market Competition:	07
	Concept, Classification and features of market, Motives of existing firm	
	profit maximization output, Price output decisions under perfect	
	competition, monopoly, monopolistic competition, and Oligopoly model,	

	Theory of competitive advantages, Demand for capital, capital budgeting, capital rationing.	
6.	Applied Macroeconomics: National Income, calculating national income, Business cycle, inflation and deflation, balance of payments, monetary policy and fiscal policies, Gross Domestic Product (GDP) and Gross National Product (GNP), Consumer Price Index (CPI), Wholesale Price Index (WPI). Consumption function, Investment function, Theory of International trade, foreign trade, foreign exchange rate function, PPP Theory.	07

References

Text Book:

- Joel Dean Managerial Economics, Prentice Hall/Pearson.
- Rangarajan Principles of Macro Economics, Tata McGraw Hill.

- Athmanand.R. Managerial Economics, Excel, New Delhi.
- P.L.Mehta, Managerial Economics, S.Chand and Sons Company Ltd., New Delhi.
- Peterson Lewis, Managerial Economics, Prentice Hall of India, New Delhi.
- Gupta, G.S., Managerial Economics: Micro Economic, McGraw Hill
- Christopher R. Thomas & S. Charles Maurice, Managerial Economics, Tata McGraw Hill, New Delhi
- Truett & Truett, Managerial Economics, John Wiley & Sons Inc.
- Petersen, H. Craig & Cris, L W, Managerial Economics, Pearson Education.
- Chaturvedi, D.D. & Gupta S.L., Managerial Economics: Text & Cases, Brijwasi Book Distributors and Publishers
- Salvatore, D, Managerial Economics in a Global Economy, Irwin, Mc Graw-Hill
- Dholakia, R.H. & Oza, A.N., Micro Economics for Management Students, OUP, Delhi.
- Keating Berry and Wilson, J H., an Economic Foundation for Business Decision, Biztantra Publication, New Delhi

Marketing Research

Course Learning Outcomes:

After successful completion of the course, students will be able to,

- 1. Apply the basics of marketing principles.
- 2. Formulate, organize and conduct a marketing research project
- 3. Apply and evaluate different sources of marketing information
- 4. Apply and evaluate various data collection and analysis techniques
- 5. Write a comprehensive market research report.

Prerequisite:

Basic understanding of Market & Research.

Course Content		
Unit No.	Description	Hrs.
1.	Basics of Marketing Management	07
	Introduction, basic definitions, functions, segmentation, targeting and	
	positioning, Product and services marketing mix, product life cycle	
2.	Introduction to Marketing Research	07
	Defining Research Problem, Developing Research Approach, Research	
	Design, Qualitative Research.	
3.	Research Methods	07
	Qualitative and Quantitative Research, Projective Technique, Case Study,	
	Descriptive Research Design, Primary & Secondary Data, Research Error	
4.	Measurement and Scaling	07
	Scale Development, Questionnaire & Form Design, Casual Research,	
	Experimental Design.	
5.	Sampling & Hypothesis Design	07
	Sampling, Hypothesis Development, Type I & Type II Errors, Data	
	Preparation, Hypothesis Testing.	
6.	Analyzing Tools and Report Preparation	07
	Cross Tabulation, Correlation & Regression, Factor Analysis. Chi-square,	
	Ethics and Report Preparation	

References

Text Book:

• Marketing Research, G.C. Beri, McGraw Hill Education.

- Boyd, Harper W. Jr., Westfall, Ralph and Stasch, Stanley, Marketing Research: Text and Cases, Richard D. Irwin Inc., Homewood, Illinois.
- Naresh K Malhotra, Satyabhushan Dash, Marketing Research- An Applied Orientation, Pearson Education, New Delhi.
- Donald R. Cooper, Pamela S Schindler, Marketing Research-Concepts and Cases. Tata McGraw-Hill Publishing Company Limited, New Delhi.
- Hair, Bush, Ortinau, Marketing Research, Tata McGraw-Hill Publishing Company Limited, New Delhi.
- Nigel Bradley, Marketing research —-Tools and Techniques. Oxford University Press, New Delhi.

Idea Generation and Validation

Course Learning Outcomes:

After successful completion of the course, students will be able to,

- 1. Identify problems and apply innovative solutions through the mode of ideation
- 2. Create ways and identify convergence tools to boost creative process
- 3. Apply various brainstorming techniques to break down ideas and visualize it create and assess business ideas
- 4. Apply core and basic concept of idea generation and creativity.

Prerequisite:

Basic understanding of Management.

Course Content		
Unit No.	Description	Hrs.
1.	Idea Generation & Opportunities search	07
	Sources of business ideas find & assess ideas, data for ideation, good	
	problem Analysis, Opportunity recognition. Opportunities through Change,	
	Opportunities in Various sectors. Steps for idea generation, Techniques for	
	idea generation	
2.	Idea Evaluation, Screening and Development	07
	Design thinking for finding solutions, prototyping, idea evaluation,	
	entrepreneurial Outlook, value proposition design, customer insight, ideas	
	development, Idea presentation. System Thinking, Design Thinking,	
	Integration of both, Idea screening methods, Idea development.	
3.	Feasibility Analysis	07
	Product/Service Feasibility Analysis, Pre-feasibility analysis- Stages of	
	Project Feasibility Analysis-Market, Industry & competition analysis,	
	environment analysis, financial feasibility analysis	
4.	Business opportunity and Market assessment strategy	07
	Entrepreneurship Readiness, Entrepreneurial Characteristics, Rewards &	
	Drawbacks, Entrepreneurial Ventures & Cause of Business Failure, Niche	
	Strategy & Competitive Advantage, Macro-Environment Assessment	
5.	Crafting business models and Lean Start-ups	07
	Introduction to business models; Creating value propositions-conventional	
	industry logic, value innovation logic; customer-focused innovation;	
	building and analyzing business models; Business model canvas,	
	Introduction to lean startups, Business Pitching.	
6.	ideation Intelligence & Validation Processes	07
	Identify the vertical operate in and the business opportunity ,Translate	
	Business Model into a Business Plan, , Take product or service to market,	
	Identify possible sources of funding for your venture — customers, friends	

and family, Angels, VCs, Bank Loans and key elements of raising money for a new venture

References

Text Book:

- Katz, Entrepreneurship Small Business, McGraw-Hill Education
- Shane, S., Technology Strategy for Managers and Entrepreneurs. Pearson: Prentice Hall

- Ramachandran, Entrepreneurship Development, McGraw-Hill, INDIA
- Byrd Megginson, Small Business Management an Entrepreneur's Guidebook, McGrawHill
- Fayolle A Entrepreneurship and new value creation. Cambridge, Cambridge University Press
- Hougaard S., The business idea. Berlin, Springer
- Lowe R & S Mariott, Enterprise: Entrepreneurship & Innovation. Burlington, Butterworth Heinemann
- Léo-Paul Dana, World Encyclopedia of Entrepreneurship, Edward Elgar publishing

New Venture Establishment

Course Learning Outcomes:

After successful completion of the course, students will be able to,

- 1. Apply the knowledge to generate ideas for starting new ventures.
- 2. Assess the market potential and design strategies to reach out to potential customers, partners, suppliers, and experts.
- 3. Analyze the legal challenges in setting up new business.
- 4. Create a business plan using a business model canvas
- 5. Apply strategies for scaling the new ventures.

Prerequisite:

Basic understanding of categories of business & start-up.

Unit No.	Description	Hrs.
1.	New Venture Opportunities:	07
	The Entrepreneurial imperative, New ventures, Entrepreneurial motivation,	
	Advantages and disadvantages of starting a new venture, New venture	
	failure, Ideation, Design thinking methodology	
2.	Methods to initiate Ventures:	07
	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	
3.	Legal Challenges in Setting up Business:	07
	Intellectual property protectionPatents, copyrights and trademarks- Legal	
	acts governing businesses in India-Forms of business organization	
4.	New Venture Finances:	07
	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	
5.	Business Plan Preparation for New Venture: Business plan concept, the nature and importance of business plan, Pitfalls to avoid in business plan, successful business plans. Elements of a business plan, assessment of business plan.	07
6.	Scaling Ventures: Venture growth, challenges of growing ventures, key elements of growth, transition from entrepreneurial stage to managerial stage, challenges of scaling globally, global threats and risks	07

References

Text Books:

- Donald F. Kuratko and Jeffrey S. Hornsby, New Venture Management: The Entrepreneur's Roadmap for Development, Management, and Growth, Taylor and Francis Publication
- Andrew Zacharakis, William D. Bygrave; Andrew C. Corbett, Entrepreneurship, Publisher: Wiley

- Ramachandran, Entrepreneurship Development, Mc Graw Hill
- Katz, Entrepreneurship Small Business, Mc Graw Hill
- Byrd Megginson,, Small Business Management An Entrepreneur's Guidebook, McGraw-Hill
- Fayolle A Entrepreneurship and new value creation. Cambridge, Cambridge University Press
- Hougaard S. The business idea. Berlin, Springer
- Lowe R & S Mariott, Enterprise: Entrepreneurship & Innovation. Burlington, Butterworth Heinemann
- Léo-Paul Dana, World Encyclopedia of Entrepreneurship. Edward Elgar

Pricing Management

Course Learning Outcomes:

After successful completion of the course, students will be able to,

- 1. Apply the key economic, analytical, and behavioral concepts associated with costs, customer behavior and competition.
- 2. Apply advanced pricing techniques.
- 3. Comprehend pricing strategies of different products, lifecycles, and companies.
- 4. Analyze price strategies of competitors in indifferent market situations through case study scenarios.

Prerequisite:

Basic understanding of Pricing of the Manufacturing Product.

Course Content		
Unit No.	Description	Hrs.
1.	Strategic Pricing:	07
	Coordinating the drivers of profitability, types of pricing, role of optimization in strategic pricing, price structure, pricing policy, price setting and price competition.	
2.	Psychology, measurement and communication of Pricing: Role of value in pricing, estimating economic and monetary value, competitive reference pricing, estimating psychological value, value based segmentation, adapting the message for product characteristics, strategies for conveying value.	07
3.	Pricing Structure and Policy: Tactics for pricing differently across customer segments, Pricing challenges/ opportunities in particular industries and market characteristics, price metrics and 08 fences, peak pricing and yield management, pricing policies and price expectations, Policies for price negotiations and objections.	07

4.	Price Level and Competition:	07
	Price setting process, communicating new prices to the market, understanding price game, reacting to competition, managing competitive information, measurement of price sensitivity.	
5.	Financial Analysis for Pricing:	07
	Analyzing costs and profits for pricing, financial implications of price alternatives, breakeven analysis, break even sales curve, specialized strategies in pricing.	
6.	Strategic Pricing Capability:	07
	Essential elements of the pricing organization, creating alignment of pricing objectives, performance measures and incentives, customer analytics to guide 08 management choices, process management analytics, management of organizational change process.	

References

Text Books:

• Thomas T. Nagle, The Strategy and Tactics of Pricing (STP), A guide to growing more profitably, John E. Hogan and Joseph Zale, Prentice Hall.

- Meehan/Simonetto/Montan/Goodin Pricing and Profitability Management, A practical guide for Business Leaders, John Wiley & Sons
- Dolan/Simon-Power Pricing-How managing price transforms the bottom line, The Free Press
- Tim J. Smith Setting Price Levels, Managing Price Discounts & Establishing Price Structures, South Western

Innovation and Entrepreneurship

Course Outcomes:

Students will be able to:

Develop entrepreneurial mind-set and attributes;

- 1. Apply process of problem-opportunity identification and feasibility assessment through developing a macro perspective of the real market, industries, domains and customers
- 2. Analyse Customer and Market segmentation, estimate Market size.
- 3. Initiate Solution design, Prototype for Proof of Concept. Understand MVP development and validation techniques to determine Product-Market fit.
- 4. Craft initial Business and Revenue models, financial planning and pricing strategy for profitability and financial feasibility of a venture.
- 5. Understand and apply story telling skills in presenting a persuasive and defensible Venture Pitch.

Prerequisite:

Basic understanding of Enterpreneurship.

Course Content		
Unit No.	Description	Hrs.
1.	Entrepreneurship Fundamentals & Context Meaning and concept, attributes and mindset of entrepreneurial and intrapreneurial leadership, role models in each and their role in economic development. Gamified role play based exploration aligned to one's short term career aspiration and ambition. An understanding of how to build entrepreneurial mindset, skillsets, attributes and networks while on campus. Core Teaching Tool: Simulation, Game, Industry Case Studies (Personalized for students – 16 industries to choose from), Venture Activity	07
2.	Problem & Customer Identification Understanding and analysing the macro Problem and Industry perspective, technological, socio-economic and urbanization trends and their implication on new opportunities. Identifying passion, identifying and defining problem using Design thinking principles. Analysing problem and validating with	07

	the potential customer. Iterating problem-customer fit. Understanding customer segmentation, creating and validating customer personas. Competition and Industry trends mapping and assessing initial opportunity. Core Teaching Tool: Several types of activities including: Class, game, Gen AI, 'Get out of the Building' and Venture Activity.	
3.	Solution design & Prototyping	07
	Understanding Customer Jobs-to-be-done and crafting innovative solution	
	design to map to customer's needs and create a strong value proposition.	
	Developing Problem-solution fit in an iterative manner. Understanding	
	prototyping and MVP. Developing a feasibility prototype with	
	differentiating value, features and benefits. Initial testing for proof-of-	
	concept and iterate on the prototype.	
	Core Teaching Tool: Venture Activity, nocode Innovation tools, Class	
	activity	
4.	Opportunity Assessment and Sizing	07
	Assess relative market position via competition analysis, sizing the market	
	and assess scope and potential scale of the opportunity.	
	Core Teaching Tool: Class and Venture Activity	
5.	Business & Financial Model, Go-to-Market Plan	07
	Introduction to Business model and types, Lean approach, 9 block lean	
	canvas model, riskiest assumptions to Business models. Importance of	
	Build - Measure - Lean approach Business planning: components of	
	Business plan- Sales plan, People plan and financial plan, Financial	
	Planning: Types of costs, preparing a financial plan for profitability using	
	financial template, understanding basics of Unit economics and analysing	
	financial performance. Introduction to Marketing and Sales, Selecting the	
	Right Channel, creating digital presence, building customer acquisition	
	strategy. Choosing a form of business organization specific to your venture,	
	identifying sources of funds: Debt & Equity, Map the Start-up Lifecycle to	
	Funding Options.	
	Core Teaching Tool: Founder Case Studies – Sama and Securely Share;	
	Class activity and discussions; Venture Activities.	

References:

1. Robert D. Hisrich, Michael P. Peters, Dean A. Shepherd, Sabyasachi Sinha (2020). Entrepreneurship, McGrawHill, 11th Edition.

- 2. Ries, E. (2011). The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses. Crown Business.
- 3. Osterwalder, A., & Pigneur, Y. (2010). Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers. John Wiley & Sons
- 4. Chowdhry Ajay, (2023) Just Aspire: Notes on Technology, Entrepreneurship and the Future.
- 5. Simon Sinek (2011) Start With Why, Penguin Books limited
- 6. Brown Tim (2019) Change by Design Revised & Updated: How Design Thinking Transforms Organizations and Inspires Innovation, Harper Business
- 7. Namita Thapar (2022) The Dolphin and the Shark: Stories on Entrepreneurship, Penguin Books Limited
- 8. Collins Jim, Porras Jerry, (2004) Built to Last: Successful Habits of Visionary Companies
- 9. Burlington Bo, (2016) Small Giants: Companies That Choose to Be Great Instead of Big
- 10. Saras D. Sarasvathy, (2008) Effectuation: Elements of Entrepreneurial Expertise, Elgar Publishing Ltd