



RBU

RAMDEOBABA UNIVERSITY, NAGPUR

Formerly Shri Ramdeobaba College of Engineering & Management (RCOEM) Est. 1984

LEARN | INNOVATE | ACCOMPLISH

PROGRAMME SCHEME & SYLLABI

School of Management

Multidisciplinary Minor [MDM]

Entrepreneurship and Venture Development

2025-26

MDM in Entrepreneurship and Venture Development

The Overview:

The Minor in Entrepreneurship and Venture Development is designed for undergraduate engineering students who aspire to become entrepreneurs and start their new ventures. This program equips students with the knowledge, skills, and mindset required to identify opportunities, develop innovative solutions, build scalable business models, and launch successful ventures.

Through hands-on learning, real-world case studies, and mentorship from industry experts, students will gain practical experience in product development, business strategy, financial planning, and go-to-market execution. The program fosters a problem-solving mindset, leadership skills, and a strong understanding of a business to help students turn their ideas into viable businesses.

Program Objectives:

By the end of this minor, students will be able to:

1. Develop an Entrepreneurial Mindset – Cultivate creativity, resilience, and problem-solving skills essential for launching and sustaining a startup.
2. Identify & Validate Business Opportunities – Use customer discovery, market research, and user feedback to assess the viability of an idea.
3. Innovate & Build Scalable Solutions – Apply design thinking, prototyping, and rapid experimentation to develop products or services.
4. Create a Sustainable Business Model – Utilize frameworks like the Business Model Canvas and Lean Startup Methodology to design profitable and scalable businesses.
5. Understand Startup Finance & Investment Strategies – Learn the fundamentals of financial planning, funding sources, valuation, and investor pitching.
6. Develop Go-to-Market & Growth Strategies – Implement branding, digital marketing, customer acquisition, and sales strategies for startup success.

Who Should Enrol?

This minor is ideal for BTech students who:

- Are passionate about innovation, startups, and technology development
- Want to develop entrepreneurial & leadership skills alongside their technical expertise
- Are interested in solving real-world problems through engineering-driven businesses
- Aspire to become startup founders, product managers, or business leaders

Minors Scheme and Curriculum Design

No	Sem	Course Type	Course Code	Course Title	Hrs/ Week		Credits	Maximum Marks			ESE Duration in Hours
					L	P		Continuous Evaluation	End Sem	Total	
1	III	Minor	24SM03TH0301	Foundations of Entrepreneurship and Venture Development	3	-	3	50	50	100	3 Hrs
2	IV	Minor	24SM03TH0401	Innovation and Product Development	3	-	3	50	50	100	3 Hrs
3	V	Minor	24SM03TH0501	Startup Finance & Business Strategy	3	-	3	50	50	100	3 Hrs
4	VI	Minor	24SM03PR0601	Startup Sandbox	-	6	3	100	-	100	NA

BTech Semester III | Minor in Entrepreneurship and Venture Development

SYLLABUS

Course Code: 24SM03TH0301

Course: Foundations of Entrepreneurship and Venture Development

L: 3 Hrs. P: 0 Hrs. per week

Credits: 3

Course Outcomes:

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

CO1: Understand entrepreneurial mindset and leadership skills.

CO2: Understand different types of innovation and entrepreneurship.

CO3: Identify real-world problems and discover customer needs.

CO4: Build a Business Model Canvas for a startup idea.

CO5: Design a compelling value proposition for their venture.

Unit 1: Entrepreneurial Mindset: Understanding Entrepreneurship & Its Importance, Characteristics of Successful Entrepreneurs, Growth Mindset vs. Fixed Mindset, Risk-Taking, Resilience & Adaptability, Entrepreneurial Leadership & Decision-Making, Case Studies of Entrepreneurs

Activity: Self-assessment: Do you have an entrepreneurial mindset?

Unit 2: Problem Identification and Customer Discovery: Identifying Market Gaps & Real-World Problems, Pain Points vs. Needs vs. Desires, Techniques for Validating Business Ideas, Empathy Mapping & Customer Personas

Activity: Develop a Customer Persona for a chosen business idea

Unit 3 and 4: Business Model Canvas: Understanding the 9 Building Blocks of the Business Model Canvas, Key Partners, Key Activities, Key Resources, Revenue Streams & Cost Structure, Real-World Application of Business Model Canvas, Iterating & Validating Business Models

Activity: Work in teams to create a Business Model Canvas for a startup idea

Module 5: Value Proposition Design: What Makes a Strong Value Proposition? Understanding Customer Jobs, Pains, and Gains, designing a Unique & Competitive Value Proposition, Aligning Value Proposition with Customer Needs, Testing & Refining Your Value Proposition

Activity: Create a Value Proposition Canvas for a new business idea

Recommended Books & Readings:

1. The Startup Owner's Manual by Steve Blank and Bob Dorf, Willey Publications
2. New Venture Creation: Kathleen R Allen, Cengage Publications
3. New Venture Creation: Jeffry A. Timmons, Stephen Spinelli, McGraw Hills Publications
4. Business Environment: Justin Paul, McGraw Hill Publications

BTech Semester IV | Minor in Entrepreneurship and Venture Development

SYLLABUS

Course Code: 24SM03TH0401

Course: Innovation and Product Development

L: 3 Hrs. P: 0 Hrs. per week

Credits: 3

Course Outcomes:

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

CO1: Understand the principles of innovation and how they drive product success.

CO2: Apply user research and design thinking to product development.

CO3: Build and test prototypes to validate ideas quickly.

CO4: Develop a structured approach to New Product Development (NPD).

CO5: Achieve Product-Market Fit (PMF) through market analysis and iteration.

Unit 1: Fundamentals of Innovation & Product Development: What is Innovation? Disruptive vs. Incremental Innovation, Case Studies: Successful vs. Failed Product Innovations, The Role of Creativity in Product Development, Technology Trends & Emerging Markets, The Innovator's Dilemma: Why companies fail to innovate.

Activity: Brainstorm an innovative product idea based on a real-world problem

Unit 2: Understanding User Needs: User-Centric Approach to Innovation, Conducting User Research & Customer Interviews, Identifying Pain Points, Needs, & Desires, Empathy Mapping & Customer Personas, Analysing Market Trends & Competitive Landscape

Activity: Conduct a Customer Discovery exercise for a business idea

Unit 3 : Prototyping & Iterative Development: Concept to Prototype: Low vs. High-Fidelity Prototypes, building a Minimum Viable Product (MVP), User Testing & Feedback Loops, Rapid Experimentation & A/B Testing, The Lean Startup Approach: Build-Measure-Learn Cycle,

Activity: Develop a paper prototype or wireframe for a product idea and conduct a usability test

Unit 4: Bringing a Product to Market: Product Roadmap & Feature Prioritisation, Manufacturing & Production Considerations, Pricing Strategies & Business Models, Marketing & Positioning a New Product, Funding & Investment for Product Development,

Activity: Develop a Go-To-Market Strategy for a product idea

Unit 5: Scaling & Achieving Product-Market Fit: What is Product-Market Fit (PMF)? Metrics to Measure PMF, Retention, NPS, Churn Rate, Pivoting Based on Market Feedback, Growth Hacking & Scaling Strategies, Sustaining Innovation & Staying Competitive

Activity: Conduct a PMF Assessment for a chosen startup or business

Recommended Books & Readings:

1. Innovator's Playbook: How to Create Great Products, Services and Experiences that Your Customers Will Love: Nathan Baird, Wiley Publications
2. New Products Management: Merle Crawford, Anthony Di Benedetto, McGraw-Hill Publications
3. An Introduction to Critical Thinking and Creativity: Think More, Think Better: J. Y. F. Lau, Wiley Publications

BTech Semester V | Minor in Entrepreneurship and Venture Development

SYLLABUS

Course Code: 24SM03TH0501

Course: Startup Finance & Business Strategy

L: 3 Hrs. P: 0 Hrs. per week

Credits: 3

Course Outcomes:

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

CO1: Craft startup funding

CO2: Build a Financial Model for a Startup

CO3: Craft branding & positioning strategy

CO4: Craft a digital marketing strategy & ad campaign for a startup

CO5: Develop the right sales model

Unit 1: Introduction to Startup Finance & Business Strategy: Importance of Financial Planning in Startups, Understanding Financial Statements: Income Statement, Balance Sheet, Cash Flow, Key Financial Metrics & Ratios for Startups, Strategic Thinking & Decision-Making for Entrepreneurs
Case Study: How financial planning impacts startup survival

Activity: Analyse the financial health of a real startup using financial statements

Unit 2: Budgeting, Forecasting, and Financial Modelling: Creating a Startup Budget & Financial Plan, Revenue Projections & Cost Estimation, Break-even Analysis & Unit Economics, Building a Financial Model for a Startup, Sensitivity Analysis: Testing Different Scenarios

Activity:

Develop a basic financial model for a startup idea

Unit 3: Branding & Positioning Strategy: What is Branding & Why Does it Matter? Crafting a Unique Value Proposition (UVP), Building a Brand Identity: Name, Logo, Colors, Messaging, Emotional Branding & Customer Loyalty
Case Study: How top brands position themselves for success

Activity: Develop a brand identity & positioning statement for a startup

Unit 4: Digital Marketing & Customer Acquisition: Key Digital Marketing Channels: SEO, PPC, Social Media, Email, Content Marketing & Storytelling for Brand Awareness, Performance Marketing: Facebook, Instagram, LinkedIn, Google Ads, Influencer & Affiliate Marketing Strategies, Growth Hacking Techniques for Rapid Traction

Activity: Create a digital marketing strategy & ad campaign for a startup

Unit 5: Sales & Distribution Channels: Choosing the Right Sales Model: B2B, B2C, D2C, Marketplace, Direct vs. Indirect Sales Strategies, Online & Offline Sales Channels Customer Relationship Management (CRM) & Sales Funnels, Partnerships & Strategic Alliances for Market Penetration

Activity: Design a sales & distribution strategy for a startup

Recommended Books & Readings:

1. Financial Management, Khan & Jain, Tata McGraw Hill
2. Project Planning Analysis, Selection, Implementation and Review, Prasanna Chandra, Tata McGraw-Hill
3. Management Accounting, M.N. Arora, Vikas Publications
4. Financial, Cost and Management Accounting, Dr. P. Periasamy, Himalaya Publishing House.
5. Financial Management, R P Rustagi, Taxman Publication
6. Strategic Brand Management by Kevin Keller, Pearson Publication
7. Digital Marketing by Seema Gupta, McGraw Hill Publication
8. This is Marketing by Seth Godin, Penguin Publications

BTech Semester VII | Minor in Entrepreneurship and Venture Development

SYLLABUS

Course Code: 24SM03PR0601

Course: Startup Sandbox

L: 0 Hrs. P: 6 Hrs. per week

Credits: 3

This semester shall comprise of Action Learning Segment which will focus on the use of all tools and techniques learned during this minor in venture formation, operation and its management.

The ultimate output of this course is a functional startup with a validated product market fit and a sound business model.

The students will be evaluated based on their progress toward achieving the following milestones:

- Milestone 1: Finalising the business idea and conducting initial market research to assess the potential demand and identify the target customer base.
- Milestone 2: Customer validation, gathering feedback, and refining the business idea to ensure it meets the needs of the market. (PoC)
- Milestone 3: Developing a comprehensive business model, including pricing, revenue streams, and go-to-market strategy along with MVP.
- Milestone 4: Presenting a final business pitch to a panel of evaluators, showcasing the refined business idea, validated model, and readiness for scaling.