

Startup Development, Business Models and Technology Commercialization

Target Audience: IIIrd Year - Polytechnic (All Branches)

Mode: Online

Duration: 40 Hours

Course Objectives

- COB1. Understand the concepts of entrepreneurship, innovation, and the startup ecosystem in the context of Viksit Bharat 2047.
- COB2. Develop entrepreneurial thinking by identifying business opportunities and applying Design Thinking to solve real-world problems.
- COB3. Design sustainable business models and prepare viable business plans for innovative startup ventures.
- COB4. Acquire knowledge of startup establishment, resource management, funding mechanisms, legal compliance, and government support schemes.
- COB5. Develop leadership, communication, digital marketing, and business pitching skills for establishing and scaling startup ventures.

Course Outcomes

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

- CO1. Explain the fundamentals of entrepreneurship, innovation, entrepreneurial competencies, and the startup ecosystem.
- CO2. Identify business opportunities by applying creativity, Design Thinking, and customer validation techniques.
- CO3. Develop a Business Model Canvas and prepare a feasible business plan for a startup venture.
- CO4. Demonstrate knowledge of startup establishment procedures, financial planning, intellectual property rights, funding sources, and government support mechanisms.
- CO5. Present a startup idea using effective leadership, teamwork, communication, digital marketing, and business pitching skills.

CO-PO Mapping:

CO / PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
CO1	2	–	–	–	–	–	2	–	–	–	3	–
CO2	–	3	2	–	–	–	–	–	–	–	2	–
CO3	–	2	3	–	–	2	–	–	–	–	2	–
CO4	–	2	–	–	–	3	–	2	–	–	2	–
CO5	–	–	–	–	–	–	–	–	2	3	3	–

UNIT-I: Entrepreneurial Mindset and Innovation (8 Hours)

Concept of entrepreneurship; Characteristics and competencies of successful entrepreneurs; Types of entrepreneurs; Entrepreneurial mindset; Innovation and creativity; Role of entrepreneurship in economic development; Viksit Bharat 2047; Atmanirbhar Bharat; Startup ecosystem in India; Government initiatives including Startup India, Stand-Up India, MSME, Skill India and Atal Innovation Mission.

UNIT-II: Opportunity Identification and Design Thinking (8 Hours)

Problem identification; Need analysis; Opportunity recognition; Creativity techniques; Brainstorming; Design Thinking process (Empathize, Define, Ideate, Prototype and Test); Customer discovery; Market survey; Customer validation; Value proposition; Feasibility analysis.

UNIT-III: Business Model Development (8 Hours)

Lean Startup methodology; Minimum Viable Product (MVP); Business Model Canvas; Customer segments; Value propositions; Channels; Customer relationships; Revenue streams; Key resources; Key activities; Key partnerships; Cost structure; Market analysis; SWOT analysis; Business plan preparation.

UNIT-IV: Startup Establishment and Resource Management (8 Hours)

Forms of business organizations; Startup registration process; DPIIT recognition; Intellectual Property Rights (IPR); Patents, trademarks and copyrights; Financial planning; Pricing strategies; Break-even analysis; Sources of startup funding; Bootstrapping; Angel investors; Venture capital; Incubators; Accelerators; Government funding schemes.

UNIT-V: Startup Growth and Entrepreneurial Leadership (8 Hours)

Leadership and team building; Business ethics; Communication and negotiation skills; Branding and digital marketing; Social media marketing; Customer relationship management; Startup scaling strategies; Risk management; Investor pitch; Pitch deck preparation; Elevator pitch; Startup case studies; Future trends in entrepreneurship.

Text Books

1. S.S. Khanka, Entrepreneurship Development, S. Chand Publishing, Latest Edition.
2. Vasant Desai, Dynamics of Entrepreneurial Development and Management, Himalaya Publishing House, Latest Edition.
3. Donald F. Kuratko, Entrepreneurship: Theory, Process and Practice, Cengage Learning, Latest Edition.

Reference Books

1. Alexander Osterwalder and Yves Pigneur, Business Model Generation, Wiley.
2. Eric Ries, The Lean Startup, Crown Business.
3. Guy Kawasaki, The Art of the Start 2.0, Portfolio.
4. Peter Thiel and Blake Masters, Zero to One, Crown Business.
5. Tim Brown, Change by Design, Harper Business.
6. Rashmi Bansal, Stay Hungry Stay Foolish, Westland Publications.