HANDBOOK POSTGRADUATE DIPLOMA IN ENTREPRENEURSHIP, INNOVATION AND DESIGN THINKING (PGD-EID)



CENTRE FOR INNOVATION AND ENTREPRENEURSHIP

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Programme Description

The **Post Graduate Diploma in Entrepreneurship, Innovation, and Design Thinking (PGDEID)** at the Centre for Innovation and Entrepreneurship (CIE) is a one-year, practice-driven programme designed to empower aspiring entrepreneurs, intrapreneurs, and changemakers. Rooted in experiential learning and interdisciplinary thinking, the course blends the core principles of management with cutting-edge tools in design thinking, innovation, startup creation, and business sustainability.

Through a dynamic mix of classroom instruction, field immersions, shadow labs, prototyping sessions, and venture-building labs, students gain hands-on experience in identifying opportunities, solving real-world problems, designing user-centric solutions, and launching viable ventures. The curriculum fosters ethical, inclusive, and impact-oriented entrepreneurship, equipping graduates to thrive in complex, uncertain, and rapidly evolving environments.

By the end of the programme, students will have developed a validated business model, a functioning prototype or venture, and the skills to lead innovation—whether in startups, social enterprises, or corporate environments.

Programme Themes

The PGDEID programme is centered around six key themes that shape the entrepreneurial journey. It begins by building an entrepreneurial mindset and leadership skills, encouraging resilience, initiative, and creative problem-solving. Students learn design thinking to develop human-centered, innovative solutions and gain a strong foundation in business modeling, finance, and operations. The programme emphasizes technology-driven entrepreneurship, integrating tools like AI to build scalable ventures. A strong focus on social impact and ethical entrepreneurship encourages students to create inclusive, responsible businesses. All learning is grounded in experience through shadow labs, field visits, and venture creation projects that connect theory with practice.

Programme Objectives

The PGDEID programme aims to:

- Develop an entrepreneurial mindset and leadership capacity among students to address real-world challenges with creativity and confidence.
- Equip learners with the tools and techniques of design thinking, innovation, and lean startup methodology to identify opportunities and build sustainable ventures.
- Provide practical knowledge in core areas of business including research, finance, marketing, legal frameworks, and operations.
- Enable students to apply emerging technologies, especially AI and digital tools, to innovate and optimize entrepreneurial processes.
- Foster a sense of ethical responsibility, social awareness, and inclusivity in venture creation.
- Offer experiential learning opportunities through startup shadowing, field visits, and hands-on projects to bridge classroom concepts with real-world application.

Programme Pedagogy

The PGDEID programme follows an experiential, learner-centric pedagogy that blends theory with handson application to prepare students for the dynamic world of entrepreneurship. The teaching approach is grounded in real-world problem-solving, collaboration, and iterative learning.

- **Experiential Learning:** Students engage in studio work, field visits, live case studies, design sprints, and shadow labs to apply concepts in real time and reflect on outcomes.
- **Interdisciplinary Approach:** The curriculum integrates principles from business, design, technology, and the social sciences to provide a holistic entrepreneurial education.
- **Project-Based Learning:** Learners work on individual and group projects—including a capstone venture—throughout the programme, encouraging ownership and initiative.

- **Mentorship and Industry Engagement:** Regular interaction with entrepreneurs, startup mentors, and investors enhances practical understanding and industry relevance.
- **Immersive Ecosystem Exposure:** Field immersion visits, ecosystem mapping, and community engagement offer students firsthand insight into the realities of startups and innovation in diverse contexts.
- **Use of Digital Tools:** The programme actively incorporates AI and other emerging technologies into coursework to ensure students are future-ready.

This pedagogy ensures that graduates are not only well-informed but also confident, creative, and capable of launching and leading ventures that make a real-world impact.

Learning Outcomes

By the end of the programme, students will be able to:

- Demonstrate an entrepreneurial mindset, including resilience, problem-solving ability, and decision-making under uncertainty.
- Apply design thinking and innovation frameworks to develop user-centered products and services.
- Conduct market research and data analysis to validate business ideas and inform decision-making.
- Build and present viable business models using lean startup principles.
- Develop financial strategies, perform valuation, and prepare for fundraising.
- Use AI and other digital tools to automate, design, and scale startup operations.
- Understand legal and ethical considerations involved in running a venture.
- Create socially responsible, scalable solutions through a structured venture development process.
- Collaborate effectively in diverse teams and communicate ideas persuasively to stakeholders.
- Launch a validated prototype or early-stage venture as part of their capstone project.

Student's Classroom Contribution

Active and consistent classroom participation is a core expectation of the PGDEID programme. Given the experiential and collaborative nature of the curriculum, each student's engagement significantly enriches the overall learning experience for the cohort.

Students are expected to:

- **Come prepared** by reviewing readings, case studies, and pre-class assignments to contribute meaningfully to discussions.
- **Participate actively** in classroom activities, group exercises, peer reviews, and reflective dialogues.
- **Respect diverse perspectives** and foster a collaborative environment that values empathy, constructive feedback, and open-mindedness.
- **Take initiative** in discussions, challenge assumptions, and bring real-world observations into the classroom.
- **Contribute to peer learning** by sharing insights, supporting group projects, and engaging in knowledge exchange.

Consistent classroom contribution is also factored into assessment criteria and is essential for developing critical thinking, communication, and leadership skills central to the entrepreneurial journey.

Assessment Strategy

The assessment strategy for the Post Graduate Diploma course at the Centre for Innovation and Entrepreneurship (CIE) is designed to holistically evaluate students' theoretical knowledge, practical skills,

and their ability to apply learning in real-world entrepreneurial contexts. The aim is to encourage continuous learning, critical thinking, innovation, and hands-on experience.

Key Components of Assessment:

- 1. **Continuous Assessment:** Students will be assessed through regular quizzes, assignments, case study analyses, and in-class activities. This ensures steady engagement with the coursework and reinforcement of concepts throughout the semester.
- 2. **Project Work and Practical Labs:** Practical application of knowledge is vital in entrepreneurship education. Students will engage in projects such as business model development, prototyping, market research, and startup ecosystem immersion. These projects allow students to demonstrate their skills in a real-world or simulated environment.
- 3. **Presentations and Reports:** Communication and storytelling are essential entrepreneurial skills. Students will be required to prepare presentations and detailed reports on their assignments and projects, enhancing their ability to convey ideas clearly and persuasively.
- 4. **Examinations:** Semester-end exams will test the theoretical understanding and analytical abilities of students. Exams will consist of a mix of objective questions, case studies, and essay-type questions.
- 5. **Capstone and Venture Creation Lab:** In the second semester, the Capstone project and Venture Creation Lab serve as major assessment components where students conceptualize, design, and pitch viable startup ideas, integrating knowledge from across the curriculum.
- 6. **Specialised Skill Electives:** Assessment in electives will be tailored based on the specific skills and competencies being developed, with an emphasis on practical outputs.

The overall grading will reflect a balanced approach that values both knowledge and its application, preparing students for the dynamic challenges of entrepreneurship.

Course Requirements

To successfully complete the Post Graduate Diploma in Entrepreneurship, Innovation, and Design Thinking, students are expected to fulfill the following course requirements:

- 1. **Attendance and Participation:** Regular attendance and active participation in lectures, workshops, labs, and immersion activities are mandatory. Engagement enhances learning outcomes and peer collaboration.
- 2. **Completion of Assignments and Projects:** Timely submission of all assignments, case studies, and project deliverables is required. These tasks are critical for developing practical skills and understanding theoretical concepts.
- 3. **Examinations:** Students must appear for all scheduled examinations and secure the minimum passing grade as prescribed by the institute.
- 4. **Elective Course Selection:** Students must select at least one specialised skill elective in the first semester from the approved list. Completion of this elective is necessary to meet the credit requirements.
- 5. **Capstone Project and Venture Creation Lab:** Active involvement and successful completion of the Capstone project and Venture Creation Lab in the second semester are compulsory. These components require students to synthesize learning and demonstrate entrepreneurial competence.
- 6. **Minimum Credit Requirements:** Students must complete the total required credits across both semesters, including core subjects, electives, and labs, as outlined in the curriculum.

7. **Code of Conduct and Academic Integrity:** Students are expected to adhere to the institute's code of conduct and maintain academic integrity throughout the course.

By meeting these requirements, students will be equipped with a comprehensive foundation and practical experience to embark on or enhance their entrepreneurial journeys.

Honour Code

At the Centre for Innovation and Entrepreneurship (CIE), all students are expected to uphold the highest standards of academic integrity, honesty, and ethical behavior by adhering both to this Honour Code and the broader honour code of the university. This commitment includes submitting original work, avoiding plagiarism and cheating, and properly acknowledging all sources. Students must engage respectfully and constructively with peers and faculty, fostering a collaborative learning environment that values diverse perspectives. Maintaining confidentiality during group work and using institutional resources responsibly are essential to sustaining trust within the community. Each student is accountable for their actions and is expected to contribute positively to the Centre's and university's reputation. Violations of these codes, such as dishonesty or disrespect, may lead to disciplinary actions, including academic penalties or suspension. By following these principles, students help build a culture of fairness, trust, and excellence that prepares them for ethical leadership and entrepreneurial success.

Delivery

The PGD course at the Centre for Innovation and Entrepreneurship (CIE) is delivered through a blend of lectures, workshops, hands-on labs, and real-world immersion activities. This mixed approach ensures that students gain both theoretical knowledge and practical skills essential for entrepreneurship. Delivery methods may include in-person sessions, guest lectures from industry experts, group projects, and interactive discussions to foster collaboration and innovation.

Action Line to be Followed

Identify a real-world problem, generate innovative ideas, validate them through market research, develop a viable business model, create prototypes, gather feedback, refine the product, plan for funding and operations, and finally launch and scale the startup while continuously iterating based on customer needs.

SEMESTER 1

S.No.	Paper Code	Paper Title	Credit	Sessional	End-Term	
1.	CIEID-101	Fundamentals of Management and	3	30	45	
		Entrepreneurship				
2.	CIEID-102	Introduction to Design Thinking, Innovation and	3	30	45	
		Idea Generation				
3.	CIEID-103	Business Research and Data Analysis	3	30	45	
4.	CIEID-104	Business Model and Lean StartUp	2	20	30	
5.	CIEID-105	Management Accounting and Finance	3	30	45	
Project Work						
6.	CIEID-106	Specialised Skill Elective	4	50	50	
7.	CIEID-107	Startup ecosystem Immersion and Shadow Lab	4	50	50	

CIEID-101: Fundamentals of Management and Entrepreneurship

Unit 1: Foundations of the Entrepreneurial Mindset

- What is entrepreneurship? Entrepreneur vs intrapreneur
- Characteristics of successful entrepreneurs (global and Indian case studies)
- The entrepreneurial mindset: initiative, grit, tolerance for ambiguity, adaptability
- Entrepreneurial Thought and Action (Babson model)
- Entrepreneurial ecosystem in India: MSMEs, start-ups, incubators, accelerators

Unit 2: Fundamentals of Management

- Principles of management: planning, organizing, leading, controlling
- Key functional areas: operations, HR, marketing, finance
- Management styles: autocratic, democratic, transformational
- Decision-making and problem-solving frameworks (SWOT, PESTLE, BCG Matrix)
- Role of strategy in entrepreneurship
- Managing uncertainty and resource constraints in startups

Unit 3: Creativity, Problem Discovery & Needs Assessment, Opportunity Identification & Validation

- Divergent and convergent thinking
- Ideation techniques (SCAMPER, Brainstorming, Mind Mapping)
- Identifying real-world problems and unmet needs
- User research: empathy mapping, interviews, journey mapping
- Market gap analysis and idea screening
- Introduction to opportunity evaluation matrices

Unit 4: Entrepreneurial Psychology and Identity

- Self-assessment tools: Big 5, MBTI, VIA strengths
- Understanding motivation, passion, and purpose
- Risk perception and decision-making under uncertainty
- Entrepreneurial resilience and mental well-being
- Founder dilemmas: solo vs co-founder, equity vs control
- Crafting a personal entrepreneurial narrative

Unit 5: Opportunity Pitching & Feedback Loops

- Storytelling and the structure of an entrepreneurial pitch
- Crafting a value proposition
- Understanding your audience: investors, incubators, customers
- Basics of pitch decks: problem, solution, market, traction, ask
- Feedback frameworks: SBI (Situation-Behavior-Impact), peer critique
- Iterating based on feedback; growth mindset in action
- Mini pitch day: students present their opportunity in teams

Suggested Readings/Resources:

- The Startup Owner's Manual Steve Blank & Bob Dorf
- Creative Confidence Tom & David Kelley
- Entrepreneurial Thought & Action Babson College resources
- Entrepreneurship Development by S.S. Khanka: Publisher: S. Chand & Company
- Innovation and Entrepreneurship by Nitin C. Khandwalla: Publisher: Tata McGraw Hill
- Harvard Business Review articles on entrepreneurial psychology and leadership
- Podcasts: How I Built This, Masters of Scale, The Musafir Stories (India context)

CIEID-102: Introduction to Design Thinking, Innovation and Idea Generation

Unit 1: Principles of Design Thinking and Human-Centered Design

- What is design thinking?
- Key principles: empathy, iteration, collaboration, experimentation
- Human-centered design vs traditional problem-solving
- The double diamond framework (Discover–Define–Develop–Deliver)
- Overview of the 5-stage Stanford d.school model: Empathy, Define, Ideate, Prototype, Test
- Relevance of design thinking in entrepreneurship and social innovation

Unit 2: Empathy, Define, Ideate

- Empathy techniques: interviews, observations, immersion
- Synthesizing user data: affinity mapping, empathy maps, journey maps
- Defining insights and framing "How Might We" (HMW) questions
- Ideation methods: brainstorming, crazy 8s, worst possible idea
- Idea clustering, prioritization, and feasibility-desirability-viability lens
- Case examples from India: Aarogya Setu, SELCO, Jaipur Foot

Unit 3: Prototype & Test

- What is a prototype? Low vs high fidelity
- Prototyping tools and materials (paper, cardboard, digital tools like Figma, Canva)
- Storyboarding, role-play, mock-ups
- Designing tests: what to test, who to test with, how to gather feedback
- Iterating based on insights; learning from failure
- MVP (Minimum Viable Product) vs Prototype

Unit 4: Managing Innovation - From Idea to Implementation

- Innovation vs creativity
- Types of innovation: product, process, business model
- Managing innovation in startups and large firms
- Innovation strategy and organizational culture
- Innovation metrics and success indicators
- Barriers to innovation and how to overcome them

Unit 5: Disruptive & Open Innovation Models

- Disruptive innovation: theory and application (Clayton Christensen)
- Open innovation: crowdsourcing, idea competitions, collaborative platforms
- Frugal innovation (Jugaad) and its importance in Indian and emerging markets
- Reverse innovation: innovations from the Global South going global
- Social innovation and systems thinking
- Case studies:

Suggested Readings/Resources:

- *Change by Design* Tim Brown
- *The Art of Innovation* Tom Kelley
- Design Thinking for Strategic Innovation Idris Mootee
- Design Thinking: A Guide for Innovation by B.K. Chakravarthy : Publisher: NID & IIT Bombay / Wiley India
- Innovation, Entrepreneurship and Design Thinking by Anjali Raina & others : Publisher: McGraw Hill Education India
- Design Thinking for Startups: A Step-by-Step Guide to Unlocking Your Innovation by Jimmy Jain & Manbir Kaur: Publisher: SAGE Publications India
- Stanford d.school guides (https://dschool.stanford.edu/resources)
- IDEO Design Kit (https://www.designkit.org)
- HBR articles on innovation management and design sprints

CIEID-103: Business Research and Data Analysis

Unit 1: Introduction to Business Research

- What is business research? Scope and relevance for entrepreneurs
- Types of research: exploratory, descriptive, causal
- The research process: from problem identification to reporting

- Research design: cross-sectional vs longitudinal studies
- Sources of information: primary vs secondary
- Defining research problems and hypotheses

Unit 2: Quantitative and Qualitative Research Methods

- Introduction to qualitative research: interviews, focus groups, observations
- Introduction to quantitative research: surveys, experiments, measurement scales
- · Sampling techniques: probability and non-probability sampling
- Ouestionnaire design and coding
- Triangulation and mixed methods research
- Data collection tools and platforms (Google Forms, Typeform)

Unit 3: Data Analysis and Interpretation

- Data preparation: coding, cleaning, and organizing
- Introduction to descriptive statistics: mean, median, mode, standard deviation
- Basics of inferential statistics: correlation, regression, hypothesis testing
- Thematic analysis for qualitative data
- Data visualization tools (Excel, Canva, Google Sheets)
- Drawing insights and telling data-driven stories

Unit 4: Field Project - User Research

- Designing a user research project
- Identifying and recruiting participants
- Conducting interviews, surveys, and observations
- Using empathy maps, journey maps, and personas
- Synthesizing findings into user insights
- Real-world problem identification through user engagement

Unit 5: Research Report and Ethical Considerations

- Structure of a research report: abstract, introduction, methodology, analysis, conclusion
- Visual presentation of data and insights
- Referencing and citations (APA, MLA)
- Ethical issues in business research: consent, confidentiality, bias
- Handling sensitive information and vulnerable populations
- Peer reviews and reflective learning

Suggested Readings/Resources:

- Business Research Methods Donald R. Cooper & Pamela S. Schindler
- Research Design John W. Creswell
- Business Research Methods by Naval Bajpai: Publisher: Pearson Education India
- Research Methodology: Methods and Techniques by C.R. Kothari & Gaurav Garg: Publisher: New Age International Publishers
- IDEO Field Guide to Human-Centered Design
- Stanford d.school resources on user research
- Harvard Business Review articles on data-driven decision making

CIEID-104: Business Model and Lean StartUp

Unit 1: Lean Startup Fundamentals

- Origins of the lean startup method (Eric Ries, Steve Blank)
- Core concepts: Build-Measure-Learn cycle
- Understanding startup assumptions and learning milestones

- Agile vs traditional startup development
- Case studies: Dropbox, Airbnb

Unit 2: Business Model Canvas & Value Proposition Design

- Introduction to the Business Model Canvas (BMC) 9 building blocks
- Value Proposition Canvas understanding customer jobs, pains, and gains
- Linking customer segments with value creation
- Exploring revenue models and cost structures
- Live BMC mapping exercise on a real-world idea

Unit 3: MVPs, Testing & Iteration

- What is an MVP? Types of MVPs (concierge, landing page, video demo, etc.)
- Building a Minimum Viable Product using no-code tools
- Testing hypotheses through MVPs
- Learning metrics vs vanity metrics
- Iteration: pivot, persevere, or perish?

Unit 4: Customer Development and Feedback Loops

- Customer Discovery: problem interviews and solution interviews
- Designing and conducting user validation
- Creating feedback loops with users and early adopters
- Mapping insight to product/market fit
- Case: The Mom Test framework for better interviews

Unit 5: Business Model Validation & Investor Pitching

- Evaluating business model viability and scalability
- Preparing an investor-friendly pitch using BMC
- Structuring a pitch: Problem-Solution-Market-Model-Ask
- Presenting to mentors and peer reviewers

Suggested Readings/Resources:

- *The Lean Startup* Eric Ries
- Business Model Generation Alexander Osterwalder & Yves Pigneur
- Value Proposition Design Osterwalder, Pigneur, Bernarda & Smith
- Start-Up Sutra: What the Angels Won't Tell You About Business and Life by Rohit Prasad
- The Startup Owner's Manual Steve Blank
- The Mom Test Rob Fitzpatrick
- Y Combinator resources & pitch deck templates

CIEID-105: Management Accounting and Finance

Unit 1: Introduction to Accounting and Financial Statements

- Purpose and users of financial information
- Principles of accounting (accrual, matching, consistency)
- Overview of financial statements: Profit & Loss Account, Balance Sheet, Cash Flow Statement
- Understanding revenue, expense, profit, and capital
- Interpreting financial statements using real startup examples

Unit 2: Costing and Break-even Analysis

- Types of costs: fixed, variable, direct, indirect
- Marginal costing and contribution margin

- Break-even analysis and its relevance for pricing decisions
- Use of cost-volume-profit (CVP) analysis in startups
- Unit economics and customer acquisition cost (CAC)

Unit 3: Budgeting and Financial Planning for Startups

- Importance of budgeting in startups
- Steps in the budgeting process
- Revenue forecasting and cost estimation
- Building a 12-month financial projection
- Cash flow budgeting and burn rate management

Unit 4: Financial Decision-Making and Ratio Analysis

- Introduction to financial decision-making tools
- Key startup ratios: Liquidity (Current ratio, Quick ratio), Profitability (Net Profit Margin, ROI), Efficiency (Inventory turnover, Receivables turnover)
- Time value of money, NPV, IRR, and payback period
- Creating a financial dashboard using Excel or Google Sheets

Unit 5: Funding Strategy and Investment Readiness

- Stages of startup funding: bootstrapping, angel, seed, VC
- Investor expectations: traction, unit economics, scalability
- Cap tables and equity distribution
- Key financials to include in a pitch deck
- Due diligence and financial data room essentials
- Understanding valuation drivers and term sheets (intro level)

Suggested Readings/Resources:

CIEID ELEC 001

- Financial Intelligence for Entrepreneurs Karen Berman & Joe Knight
- Accounting for Non-Accountants Wayne Label
- Bonus: Accounting for Managers by T.S. Grewal & S.C. Gupta
- Venture Deals Brad Feld & Jason Mendelson (for Unit 5)
- Startup India resources on funding and financial compliance
- Templates: Monthly Budget Sheet, 12-Month Forecast, Simple P&L

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CIEID-106: Specialised Skill Elective (list to be included)

CIEID-ELEC-001 -	Basics of Digital Marketing
CIEID-ELEC-002 -	Performance Marketing
CIEID-ELEC-003 -	Basics of Python
CIEID-ELEC-004 -	Data Science – Basic Level
CIEID-ELEC-005 -	AI/ML Basic Level
CIEID-ELEC-006 -	Cyber Security
CIEID-ELEC-007 -	Website Development Without Coding
CIEID-ELEC-008 -	Audio/Video Editing
CIEID-ELEC-009 -	Excel – Basic Level
CIEID-ELEC-010 -	Excel – Advanced Level
CIEID-ELEC-011 -	UI/UX
CIEID-ELEC-012 -	Graphic Designing

CIEID-107: Startup ecosystem Immersion and Shadow Lab

Unit 1: Understanding the Startup Ecosystem

- Overview of the startup lifecycle
- Components of a startup ecosystem: founders, incubators, accelerators, VCs, government bodies
- Role of platforms like Startup India, Invest India, NASSCOM, T-Hub, CIE (Jamia)
- Global vs Indian ecosystem dynamics
- Challenges and opportunities for first-time founders

Unit 2: Mapping Stakeholders and Support Structures

- Identifying local and regional ecosystem enablers
- Introduction to ecosystem mapping tools and frameworks
- Types of support: incubation, mentorship, legal aid, funding, co-working
- Creating a stakeholder map and analyzing value flows
- Guest sessions with ecosystem partners

Unit 3: Entrepreneur Shadowing - Planning and Onboarding

- Selecting and profiling an entrepreneur to shadow
- Setting learning goals and defining observation themes
- Building a shadowing plan and confidentiality agreement
- Ethics of shadowing and observation
- Orientation workshop and mentor assignment

Unit 4: Observational Learning and Reflective Practice

- Observing startup operations, decision-making, team dynamics
- Maintaining a daily shadowing journal
- Reflective frameworks: Gibbs' model, Kolb's learning cycle
- Identifying patterns, surprises, and dilemmas in entrepreneurial behavior
- Mid-course check-in with faculty mentor

Unit 5: Insights, Learnings, and Presentation

- Synthesizing findings into actionable insights
- Linking observations to theory and classroom concepts
- Final reflective report (2000–2500 words)
- Group presentations: Entrepreneurial learning stories
- Feedback from peers, mentors, and faculty

Suggested Readings/Resources:

- The Startup Playbook David Kidder
- The Lean Founder Codie Sanchez (blog/podcast)
- *The Innovator's DNA* Dyer, Gregersen, Christensen
- Dream With Your Eyes Open by Ronnie Screwvala
- The Moonshot Game: Adventures of an Indian Venture Capitalist" by Rahul Chandra
- Case videos from Y Combinator, Stanford eCorner, and YourStory
- Field visit templates, shadow journal template (to be provided)

SEMESTER 2

S.No.	Paper Code	Paper Title	Credit	Sessional	End-Term	
1.	CIEID-201	Prototyping and Product Development	3	30	45	
2.	CIEID-202	Marketing and Story Telling	2	20	30	
3.	CIEID-203	StartUp Finance, Fundraising and Valuation	3	30	45	
4.	CIEID-204	Legal and Ethical Aspects of	2	20	30	
		Entrepreneurship				
5.	CIEID-205	Social Innovation and Impact	2	20	30	
		Entrepreneurship				
6.	CIEID-206	Innovative technologies for Start-Ups	2	20	30	
Project Work						
6.	CIEID-207	Venture Creation Lab	4	50	50	
7.	CIEID-208	Capstone: Innovation Challenge	4	50	50	

CIEID-201: Prototyping and Product Development

Unit 1: Introduction to Prototyping and Product Development

- What is prototyping and why it matters in entrepreneurship
- Prototyping vs product development
- Types of prototypes: physical, digital, experiential, service
- The iterative product development process
- Overview of lean product development methodology
- Case examples from successful early-stage product stories

Unit 2: Digital Tools for Design and Prototyping

- Wireframing and UI/UX basics
- Introduction to tools: Figma, Canva, TinkerCAD, Adobe XD
- Creating interactive mockups and user flows
- Visual storytelling and product documentation
- Accessibility and inclusivity in design
- Demo: Building a clickable prototype in Figma

Unit 3: Iterative Design & Testing

- Designing for feedback: What to test, when to test
- Conducting usability tests and collecting insights
- Applying test-feedback-learn cycles
- Role of iteration in reducing failure and increasing fit
- Using A/B testing and heatmaps (basic introduction)
- Documenting design decisions and revisions

Unit 4: Building and Refining MVPs

- What qualifies as an MVP?
- Types of MVPs: landing page, concierge, wizard-of-oz, explainer video
- Tools for MVP creation: Glide, Bubble, Carrd, Webflow, Google Forms
- Building MVPs for digital products and service businesses
- Evaluating MVP performance: traction metrics, feedback analysis
- Pivoting vs persevering

Unit 5: Product Showcase and Peer Review

- Preparing prototypes for presentation
- Structuring a product pitch: problem, solution, user journey, value
- Peer testing and feedback frameworks

- Conducting a product showcase or demo day
- Incorporating feedback into next-stage planning
- Final submission: prototype walkthrough + iteration journal

- Sprint: How to Solve Big Problems and Test New Ideas in Just Five Days Jake Knapp
- Prototyping: A Practitioner's Guide Todd Zaki Warfel
- Product Management: The Indian Context by Aswath Damodaran & Aakanksha Chhikara
- Design Thinking for Startups by Jimmy Jain & Manbir Kaur
- Stanford d.school resources on prototyping
- Figma, Canva, Glide, Bubble tutorials
- IDEO's Design Kit (<u>www.designkit.org</u>)

CIEID-202: Marketing, Story Telling and Customer Acquisition

Unit 1: Marketing Foundations for Startups

- Principles of marketing for early-stage ventures
- Understanding customer segments, personas, and needs
- Positioning and value proposition articulation
- Marketing funnel: awareness, interest, conversion, retention
- Guerrilla marketing and low-cost tactics for startups
- Case studies of Indian D2C and bootstrapped brands

Unit 2: Brand Storytelling and Content Marketing

- Elements of effective storytelling: structure, emotion, conflict, resolution
- Building a brand voice and identity
- Types of content: educational, emotional, entertaining, promotional
- Content marketing strategy: blogs, videos, podcasts, newsletters
- Tools for content creation: Canva, ChatGPT, Notion AI
- Storytelling frameworks: Hero's Journey, StoryBrand, Pixar Pitch

Unit 3: Digital Marketing & Social Media Strategy

- Introduction to digital channels: SEO, SEM, social, email
- Social media strategy: choosing the right platform (Instagram, LinkedIn, YouTube)
- Performance marketing: basics of paid ads and targeting
- Analytics and metrics: engagement, conversion, CAC, ROAS
- Introduction to tools: Meta Ads Manager, Mailchimp, Google Analytics
- Influencer and micro-influencer marketing

Unit 4: Community Building and Customer Loyalty

- What is a brand community and why it matters
- Engagement strategies: referral programs, UGC, events, feedback loops
- Building trust and advocacy: testimonials, reviews, social proof
- Customer onboarding and lifecycle management
- Examples: Zomato, Cred, Lijjat Papad

Unit 5: Go-To-Market Strategy and Campaign Launch

- Defining the GTM strategy: goals, audience, channels, messaging
- Pre-launch, launch, and post-launch planning
- Designing campaign assets and messaging flows
- Testing and iteration: A/B testing, feedback loops

- Launching the campaign: real or simulated
- Reflection and reporting: what worked, what didn't

- Principles of Marketing by Philip Kotler, Gary Armstrong, adapted for Indian markets (Indian edition)
- The Power of Storytelling by Ritu Singh
- Sales and Distribution Management by Krishna K. Havaldar & Vasant M. Cavale
- Building A StoryBrand Donald Miller
- *Made to Stick* Chip Heath & Dan Heath
- Contagious: How to Build Word of Mouth in the Digital Age Jonah Berger
- HubSpot Academy and Google Digital Garage (free modules)
- Tools: Canva, Meta Business Suite, Google Trends, Mailchimp
- Podcasts: The Seen & The Unseen, Marketing School, Brands That Matter

CIEID-203: StartUp Finance, Fundraising and Valuation

Unit 1: Introduction to Startup Financing

- Importance of finance in entrepreneurial decision-making
- Overview of startup financial journey: bootstrapping to IPO
- Burn rate, runway, and cash flow management
- Key financial metrics for startups (CAC, LTV, gross margin, runway)
- Understanding investor psychology and risk-return expectations

Unit 2: Sources of Capital and Fundraising Stages

- Bootstrapping, friends and family, angel investors
- Incubators, accelerators, venture capital, crowdfunding
- Debt vs equity financing for startups
- Understanding pre-seed, seed, Series A and beyond
- Government and institutional funding (Startup India, SIDBI, AIFs)

Unit 3: Valuation Methods and Cap Tables

- Why valuation matters in fundraising
- Common startup valuation methods: Comparable company analysis, Discounted cash flow (DCF), Berkus and Scorecard methods (early-stage)
- Building and analyzing cap tables
- Dilution, equity splits, and founder stakes
- Using Excel/Google Sheets for cap table tracking

Unit 4: Investor Engagement & Fundraising Pitching

- Preparing for investor meetings: what investors look for
- Components of a winning pitch deck: Problem, Solution, Market, Model, Traction, Team, Ask
- Elevator pitch vs full pitch
- Pitching formats: demo day, 1:1 meetings, video pitch
- Handling investor questions and objections

Unit 5: Financial Negotiation and Term Sheets

- Understanding term sheets: valuation, equity, liquidation preference
- Key terms: pre-money vs post-money valuation, anti-dilution, ESOPs
- Founders' rights and obligations
- Staging deals and milestone-based funding
- Legal and strategic implications of term sheet clauses

Negotiation strategies and red flags

Suggested Readings/Resources:

- Venture Deals Brad Feld & Jason Mendelson
- Angel Jason Calacanis
- The Art of Startup Fundraising Alejandro Cremades
- Venture Capital and Private Equity: An Indian Perspective by N. Balasubramanian
- Entrepreneurship and Venture Capital by Dr. C.B. Gupta and Dr. N. P. Srinivasan
- Y Combinator Library (startupschool.org)
- Startup India funding portal

CIEID-204: Legal and Ethical Aspects of Entrepreneurship

Unit 1: Business Entity Formation and Compliance

- Types of business entities: Proprietorship, Partnership, LLP, Pvt Ltd, OPC
- Choosing the right entity: taxation, compliance, scalability
- Registration process and legal documentation (e.g., DIN, PAN, GST)
- Overview of ROC, MCA, and Startup India registration
- Statutory compliance: labor laws, taxation, bookkeeping basics

Unit 2: Intellectual Property Rights (IPR)

- Introduction to IPR: trademarks, copyrights, patents, and designs
- When and why to protect IP
- Filing process and costs in India (IP India portal)
- Common IP mistakes by startups
- IP in product, brand, and software innovation
- Licensing vs ownership, open-source considerations

Unit 3: Legal Agreements and Contract Law

- Basics of contract law: offer, acceptance, consideration, enforceability
- Key agreements for startups: Co-founder agreements, Non-disclosure agreements (NDAs), Employment/consultant contracts, Vendor and customer contracts
- Termination clauses and dispute resolution
- Legal enforceability and implications of breach

Unit 4: Startup Governance and Risk Management

- Understanding corporate governance: role of founders, directors, advisors
- Board management and compliance frameworks
- Identifying legal and operational risks
- Basics of insurance for startups: liability, cyber, D&O
- Compliance checklist for early-stage startups
- Managing investor relations and board-level expectations

Unit 5: Ethical Decision-Making in Startups

- What is entrepreneurial ethics?
- Common ethical dilemmas in startups (e.g., data privacy, financial reporting, founder conflict)
- Whistleblower protection and building an ethical culture
- Case studies: Theranos, Uber, ethical pivots
- Frameworks for ethical decision-making
- Building purpose-driven, socially responsible ventures

- Legal Guide for Startups YourStory & NASSCOM
- Startup Law 101 Susan L. Keller (Open-source guide)
- Legal and Ethical Environment of Business by Dr. P.C. Tulsian & Bharat Tulsian
- Ethics in Business and Corporate Governance by Prof. S.K. Chakraborty
- IPR Handbook IP India (https://ipindia.gov.in/)
- Ministry of Corporate Affairs (<u>www.mca.gov.in</u>)
- Case studies from Harvard Business Review and Indian startup ecosystems
- Templates: NDA, founder agreement, MoU, pitch-term checklist

CIEID-205: Social Innovation and Impact Entrepreneurship

Unit 1: Introduction to Social Innovation

- What is social innovation? Key definitions and historical evolution
- Social entrepreneurship vs traditional entrepreneurship vs CSR
- Frugal innovation and inclusive design
- Key players in the ecosystem: NGOs, social enterprises, government, impact investors
- Case studies: SELCO, Araku Coffee, Rang De, Barefoot College

Unit 2: Systems Thinking and Social Problem Framing

- Introduction to systems thinking
- Root cause analysis and problem trees
- Stakeholder mapping and empathy interviews
- Framing "wicked problems"
- Using systems maps and feedback loops
- Case application: education, water, waste, or gender equity challenge

Unit 3: Impact Metrics and Measurement

- What is impact? Inputs vs outputs vs outcomes vs impact
- Introduction to Theory of Change (ToC) and logic frameworks
- Key Performance Indicators (KPIs) for social ventures
- Tools: IRIS+, SDGs alignment, SROI (Social Return on Investment) basics
- Data collection methods for impact assessment
- Ethical considerations in impact reporting

Unit 4: Funding and Scaling Social Ventures

- Hybrid models: non-profit, for-profit, and hybrid structures (Section 8, Trusts, B Corps)
- Revenue models for social ventures: fee-for-service, cross-subsidy, grant + earn
- Sources of funding: grants, impact investors, CSR, fellowships (e.g., Acumen, Echoing Green)
- Scalability frameworks: replicability vs deepening impact
- Legal compliance and registration under Indian law

Unit 5: Pitching for Social Impact - Practicum

- Crafting a purpose-driven pitch
- Structuring a social impact story: problem, approach, impact, ask
- Pitching to NGOs, foundations, and CSR units
- Visual storytelling and use of impact data
- Live practicum: students pitch their social innovation idea
- Peer feedback and faculty mentoring

Suggested Readings/Resources:

- How to Change the World David Bornstein
- Social Entrepreneurship and Innovation by Dr. C.V. Baxi & Dr. Smita Nair
- *The Blue Sweater* Jacqueline Novogratz
- Stanford Social Innovation Review (SSIR)
- Measuring Social Impact Acumen Academy Course
- Theory of Change Toolkit ActKnowledge
- IRIS+ Metrics Global Impact Investing Network (GIIN)

CIEID-206: Innovative technologies for Start-Ups

Unit 1: Introduction to Emerging Technologies in Entrepreneurship

- What are emerging technologies? Trends in 2024 and beyond
- Role of technology in product-market fit, scaling, and automation
- Overview of technologies: AI, blockchain, IoT, AR/VR, Web3 (conceptual)
- Tech adoption challenges and opportunities for Indian startups
- Case studies: Razorpay, Zepto, Koo, Agnikul, Gram Vaani

Unit 2: Leveraging AI and Automation Tools for Business Growth

- Generative AI and its startup use cases
- AI for ideation, branding, and customer insights
- Tools: ChatGPT, Perplexity, Synthesia, Copy.ai
- Business automation: Zapier, Make, Calendly, Notion AI
- Building smart workflows with AI and bots
- Limitations of AI: hallucination, bias, over-reliance

Unit 3: No-Code and Low-Code Platforms for Rapid Development

- What is no-code/low-code and why it matters
- Tools overview: Glide, Webflow, Bubble, Carrd, Airtable
- Building websites, forms, CRMs, and marketplaces without code
- Integration with APIs and third-party apps
- Live build-a-thon: create a functional MVP in 1 week
- Scaling limits and when to shift to custom development

Unit 4: Digital Tools for Marketing, Operations, and Customer Engagement

- Tools for digital marketing: Canva, Meta Business Suite, Mailchimp
- CRM and customer success tools: HubSpot, Zoho CRM, Freshdesk
- Analytics and data tracking: Google Analytics, Mixpanel, Hotjar
- E-commerce platforms: Shopify, Instamojo
- Engaging users via WhatsApp Business, Telegram, community platforms
- Case activity: Build a toolstack for a hypothetical startup

Unit 5: Technology Integration and Ethical Considerations

- Privacy, security, and data ethics for startups
- Tech-enabled inclusion vs tech-driven exclusion
- Ethical dilemmas in AI and automation (deepfakes, profiling, surveillance)
- Responsible innovation frameworks (OECD, Design Justice)
- Cybersecurity basics for early-stage startups
- Sustainability and environmental cost of digital infrastructure

Suggested Readings/Resources:

• No-Code Playbook - Webflow

- AI Superpowers Kai-Fu Lee
- Innovation and Technology Management by V.K. Narayanan
- Innovation and Entrepreneurship by Peter F. Drucker (Indian edition with localized case studies)
- Technology Innovation and Entrepreneurship: Indian Context by Dr. T.V. Ramachandra
- The Lean Tech Stack Y Combinator Startup Library
- Acumen Academy's Ethical Leadership in Tech
- Tools: ChatGPT, Glide, Zapier, Canva, Google Workspace
- Platforms: Product Hunt, IndieHackers, Makerpad

CIEID-207: Venture Creation Lab

Unit 1: Problem Identification and Opportunity Validation

- Selecting a domain of interest and target user
- User interviews, observation, and empathy mapping
- Problem framing and hypothesis generation
- Market sizing, trends, and competitor benchmarking
- Validation techniques: surveys, landing pages, pre-orders
- Tools: Google Forms, Miro, Persona templates

Unit 2: Designing Value Propositions and Business Models

- Refining the "problem-solution" fit
- Value Proposition Canvas (Jobs, Pains, Gains)
- Business Model Canvas 9 building blocks
- Revenue model design and pricing logic
- Peer reviews and mentor feedback loops
- Tools: Strategyzer, BMC templates, pricing calculators

Unit 3: MVP Development and Customer Feedback

- Rapid prototyping strategies for digital and physical products
- Building MVPs using no-code or low-code tools
- Conducting usability tests and collecting user feedback
- Product refinement and version tracking
- KPIs and early traction indicators
- Tools: Glide, Bubble, Typeform, Figma, Feedback grids

Unit 4: Go-to-Market Strategy and Financial Planning

- Identifying early adopters and defining marketing channels
- Community engagement and acquisition strategies
- Budgeting and forecasting for a lean launch
- Building a basic 12-month financial plan
- Aligning financial goals with growth milestones
- Tools: GTM canvas, Google Sheets, Startup Financial Templates

Unit 5: Pitch Preparation and Demo Day

- Elements of an effective pitch: clarity, credibility, conviction
- Building a pitch deck: Problem, Solution, Market, Model, Traction, Ask
- Storytelling techniques and visual presentation
- Mock pitch sessions with mentor feedback
- Final Demo Day with jury and feedback
- Submission: pitch deck + traction report + learning journal

- The Startup Owner's Manual Steve Blank
- Testing Business Ideas David Bland & Alex Osterwalder
- Pitch Anything Oren Klaff
- Startup School by Y Combinator (videos and templates)
- Demo Day videos (Techstars, 500 Startups, Seguoia)
- Templates: BMC, MVP tracker, GTM plan, pitch deck builder

CIEID-208: Capstone: Innovation Challenge

Unit 1: Ideation and Challenge Identification

- Selection of capstone theme or challenge domain (education, health, sustainability, etc.)
- Stakeholder mapping and problem discovery
- Defining challenge statements and desired outcomes
- Forming interdisciplinary teams (optional)
- Planning tools: Challenge brief, Gantt chart, feasibility matrix

Unit 2: Research, Validation & MVP Development

- Primary and secondary research methods
- User interviews, field visits, desktop research
- Synthesizing insights and defining MVP features
- · Prototyping and usability testing
- Validation techniques and documentation
- Tools: Empathy map, user persona, MVP feedback log

Unit 3: Marketing, Operations, and Financials

- Market definition and sizing
- Customer acquisition strategy
- Operations planning: suppliers, partnerships, distribution
- Financial forecasting: cost structure, revenue model, breakeven
- Preparing a lean business plan
- Tools: Financial model sheet, marketing channels canvas

Unit 4: Building & Refining Your Startup Pitch

- Storyboarding the pitch: problem-solution fit, traction, and ask
- Visual design and storytelling techniques
- Peer reviews, mentor feedback, and iteration
- Addressing investor concerns and objections
- Final pitch deck preparation
- Tools: Canva, Pitch templates, Investor one-pager

Unit 5: Final Showcase and Reflective Learning

- Capstone Showcase/Demo Day: pitch in front of external panel
- Q&A and expert feedback
- Reflection reports: personal and team learnings, success metrics, failures
- Preparing for post-program continuation: incubation, fellowship, fundraising
- Submission: Pitch deck + MVP demo + reflection paper + business brief

Suggested Readings/Resources:

- Creative Confidence Tom & David Kelley
- Zero to One Peter Thiel
- The Field Guide to Human-Centered Design IDEO
- Capstone playbooks from Stanford d.school, MIT Sandbox, Acumen Academy
- Demo Day formats: YC, NSRCEL, AIC, Villgro
- Templates: Pitch deck, MVP tracker, Reflection log, Business model summary