INSTITUTION'S INNOVATION COUNCIL
(Ministry of Education Initiative)

AICTE
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Ministry of Education's INNOVATION CELL
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2025

Institute Startup Policy Manual

Aligned with National Innovation and Startup Policy 2019

MIT

MANAKULA VINAYAGAR
INSTITUTE OF TECHNOLOGY
An Autonomous Institution
Affiliated to Pondicherry University, Approved by AICTE, New Delhi,
Accredited by NBA, New Delhi and NAAC with 'A' Grade
Kalitheerthalkuppam, Puducherry- 605 107.

MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY

Kalitheerthal kuppam, Madagadipet Puducherry

An Autonomous Institute

INSTITUTE INNOVATION AND START-UP POLICY

For Students and Faculty Members

(Enhanced Version 2.0 - Aligned with National Innovation and Startup Policy 2019)

AICTE Ministry of Education IIC

August 12, 2025

Contents

Chapter 1

Preamble, Vision and Mission

1.1 Preamble

The National Innovation and Startup Policy (NISP) 2019, released by AICTE, emphasized the critical need for fostering innovation and entrepreneurial culture in Higher Education Institutions (HEIs). Building upon this foundation, Manakula Vinayagar Institute of Technology (MVIT) has developed this comprehensive Innovation and Startup Policy to create a robust ecosystem for nurturing innovation, entrepreneurship, and technology commercialization.

This enhanced policy version 2.0 addresses the evolving needs of the startup ecosystem, incorporates industry 4.0 technologies, and provides detailed frameworks for sustainable entrepreneurship development within the academic environment.

Key Policy Principles

- **Innovation-Driven Growth:** Systematic conversion of ideas into viable commercial solutions
- **Academic Integration:** Seamless integration of entrepreneurship with academic excellence
- **Industry Collaboration:** Strong partnerships with industry for real-world problem solving
- **Sustainable Development:** Focus on economically and environmentally sustainable solutions
- **Inclusive Ecosystem:** Equal opportunities for all students, faculty, and stakeholders

1.2 Institute Vision

To be a globally reputed Technical Institution creating competent leaders and skillful innovators in Science, Technology and Management with a strong entrepreneurial mindset.

1.3 Institute Mission

1. Providing a dynamic and creative learning environment for students to acquire exemplary technical, analytical, and entrepreneurial skills
2. Imbibing a spirit of innovation and research among students and faculty for solving critical societal and industrial problems
3. Promoting Innovation, Employability and entrepreneurship skills through strong industry-academia collaboration
4. Serving society through technical intervention and creating socially responsible entrepreneurs
5. Fostering a culture of intellectual property creation and commercialization

Chapter 2

Policy Objectives and Scope

2.1 Primary Objectives

2.1.1 Innovation Cultivation

- Motivate students, faculty, and alumni to convert innovative ideas into commercially viable products/processes
- Establish systematic ideation to commercialization pathways
- Create interdisciplinary innovation opportunities

2.1.2 Economic Impact Generation

- Support technology-driven startups that create employment opportunities
- Focus on scalable solutions addressing local and global market needs
- Develop sustainable business models with measurable economic impact

2.1.3 Infrastructure and Support Excellence

- Provide comprehensive infrastructure for pre-incubation, incubation, and acceleration phases
- Offer technical support, mentoring, funding, and IP protection services
- Establish industry-standard prototyping and testing facilities

2.1.4 Industry Integration

- Promote Industry-Institute collaborative ventures
- Develop market-ready products and services through industry guidance
- Create pathways for technology transfer and licensing

2.1.5 Sustainable Ecosystem Development

- Build self-sustaining campus startup models across engineering disciplines
- Establish alumni entrepreneur networks for continuous ecosystem strengthening
- Create revenue-generating models for long-term sustainability

2.2 Policy Scope

This policy applies to:

- All registered students (UG, PG, PhD) of MVIT
- Faculty members and research staff
- Alumni within 5 years of graduation
- External collaborators under approved partnership programs
- Industry partners in joint innovation projects

Chapter 3

Strategies and Governance Structure

3.1 Governance Hierarchy

3.1.1 Innovation and Entrepreneurship Council (IEC)

lightgray **Position**	**Description**
Chairman	Director/Principal
Vice-Chairman	Senior Professor with entrepreneurial experience
Members	Heads of all Departments Industry Representatives (minimum 3) Successful Alumni Entrepreneurs (minimum 2) Student Representatives (2) Legal Advisor Finance Officer

Table 3.1: Innovation and Entrepreneurship Council Structure

3.1.2 Executive Committee

- **Director, Innovation and Entrepreneurship:** Senior faculty member with proven industry/entrepreneurial experience
- **Innovation Cell Head:** Faculty coordinator for innovation activities
- **Incubation Center Manager:** Professional manager with startup ecosystem experience
- **IP Cell Coordinator:** Faculty member with IP expertise
- **Industry Relations Officer:** Professional managing industry partnerships

3.2 Operational Structure

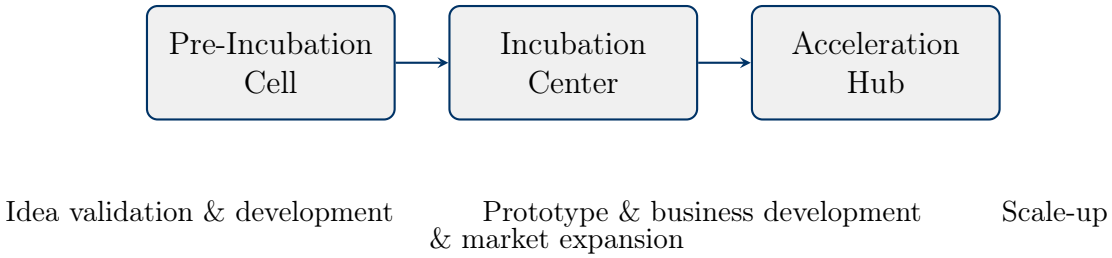

Figure 3.1: Innovation Ecosystem Flow

3.2.1 Pre-Incubation Cell

- Idea validation and development support
- Prototype development assistance
- Market research guidance
- Team formation support

3.2.2 Incubation Center

- Dedicated space allocation (minimum 5000 sq ft)
- 24x7 operational support
- Mentorship coordination
- Funding facilitation

3.2.3 Acceleration Hub

- Scale-up support for graduated startups
- Market expansion assistance
- Advanced funding connections
- International market access support

3.3 Decision-Making Framework

lightgray **Review Type**	**Frequency**	**Purpose**
Monthly Review	Monthly	Progress tracking and issue resolution
Quarterly Assessment	Quarterly	Performance evaluation and strategic adjustments
Annual Policy Review	Annually	Comprehensive policy updates
Emergency Decisions	As needed	Fast-track approval for time-sensitive opportunities

Table 3.2: Decision-Making Timeline

Chapter 4

Financial Framework and Funding Mechanisms

4.1 Institutional Funding Allocation

Innovation Fund Corpus

Minimum 2% of annual institutional budget allocated specifically for innovation and startup activities

4.1.1 Fund Distribution

Figure 4.1: Innovation Fund Distribution

4.2 Multi-Tier Funding Structure

lightgray **Tier**	**Amount**	**Purpose**	**Evaluation Time**	**Approval Authority**
Tier 1	10,000 - 25,000	Idea validation, market research, basic prototyping	7 working days	Innovation Cell Head
Tier 2	25,000 - 2,00,000	Product development, advanced prototyping, initial testing	15 working days	Executive Committee

lightgray **Tier**	**Amount**	**Purpose**	**Evaluation Time**	**Approval Authority**
Tier 3	2,00,000 - 10,00,000	Market entry, scaling, working capital	30 working days	Innovation and Entrepreneurship Council
Tier 4	10,00,000+	Expansion, technology upgrades, market scaling	45 working days	IEC with external expert consultation

Table 4.1: Multi-Tier Funding Structure

4.3 Revenue Sharing Framework

lightgray **Institute Support Level**	**Institute Share**	**Duration**
No institute facilities used	0%	N/A
Minimal support (<50,000)	5-10% revenue share	3 years
Moderate support (50,000-2,00,000)	10-15% revenue share	5 years
Substantial support (>2,00,000)	15-25% equity stake	Permanent

Table 4.2: Revenue Sharing Based on Institute Support

Chapter 5

Institutional Infrastructure Support

5.1 Physical Infrastructure

5.1.1 Innovation Hub

- Open innovation workspace with hot-desking facilities
- Ideation rooms with digital collaboration tools
- 3D printing and rapid prototyping facility
- Basic electronics and mechanical workshop

5.1.2 Incubation Center

- 20 dedicated startup workstations
- 5 private offices for advanced ventures
- Conference rooms with video conferencing capability
- Reception and administrative support area

5.1.3 Specialized Laboratories

- Access to all departmental laboratories during non-class hours
- Dedicated research equipment usage protocols
- Priority booking system for startup projects
- Extended operational hours (6 AM to 11 PM)

5.2 Digital Infrastructure

5.2.1 High-Speed Connectivity

- Dedicated 1.2 Gbps internet connection for innovation

- Priority bandwidth allocation for startup activities
- Cloud computing resources access
- Cybersecurity support and training

5.2.2 Software Ecosystem

- Enterprise software licenses (CAD, simulation, business tools)
- Development environments and programming tools
- Industry-specific software based on startup requirements
- Legal and compliance software access

5.2.3 Digital Platforms

- Innovation management portal for idea submission and tracking
- Mentor-mentee matching platform
- Progress monitoring and reporting dashboards
- Alumni entrepreneur network platform

Chapter 6

Technology-Specific Infrastructure (Electronics Focus)

6.1 Electronics Prototyping Facility

6.1.1 PCB Design and Fabrication

lightgray **Equipment/Software**	**Capability**
Professional PCB design software	Altium Designer, KiCad
In-house PCB fabrication	Prototype PCB manufacturing
Pick and place machine	SMD assembly capability
Reflow oven and wave soldering	Professional assembly equipment

Table 6.1: PCB Development Capabilities

6.1.2 Testing and Measurement Equipment

- Digital oscilloscopes (up to 1 GHz bandwidth)
- Spectrum analyzers and network analyzers
- Logic analyzers and protocol analyzers
- Environmental testing chambers

6.2 Embedded Systems Development

Development Platforms Available

- Arduino, Raspberry Pi, and various microcontroller development boards
- FPGA development kits (Xilinx, Intel/Altera)
- IoT development platforms and sensor kits

- Robotics development platforms

6.2.1 Software Tools

- Embedded development environments (Keil, IAR, Code Composer Studio)
- FPGA design tools (Vivado, Quartus)
- Simulation and modeling software
- Version control and collaboration tools

6.3 Industry 4.0 Technology Access

6.3.1 IoT and Connectivity

- Industrial IoT platforms and gateways
- Various communication modules (WiFi, Bluetooth, LoRa, 5G)
- Edge computing devices and platforms
- Cloud platform access (AWS IoT, Azure IoT, Google Cloud IoT)

6.3.2 AI/ML Hardware

- GPU-accelerated computing platforms
- AI development boards (NVIDIA Jetson, Google Coral)
- Sensor fusion and computer vision hardware
- Edge AI processing units

6.4 Regulatory Compliance Support

lightgray **Certification Type**	**Support Provided**
BIS Certification	Bureau of Indian Standards certification guidance
FCC/CE Marking	Export product compliance support
EMC/EMI Testing	Electromagnetic compatibility testing facility access
Safety Standards	Product safety compliance consulting

Table 6.2: Regulatory Compliance Support Services

Chapter 7

Nurturing Innovations and Startups

7.1 Innovation Pipeline Development

7.1.1 Systematic Innovation Process

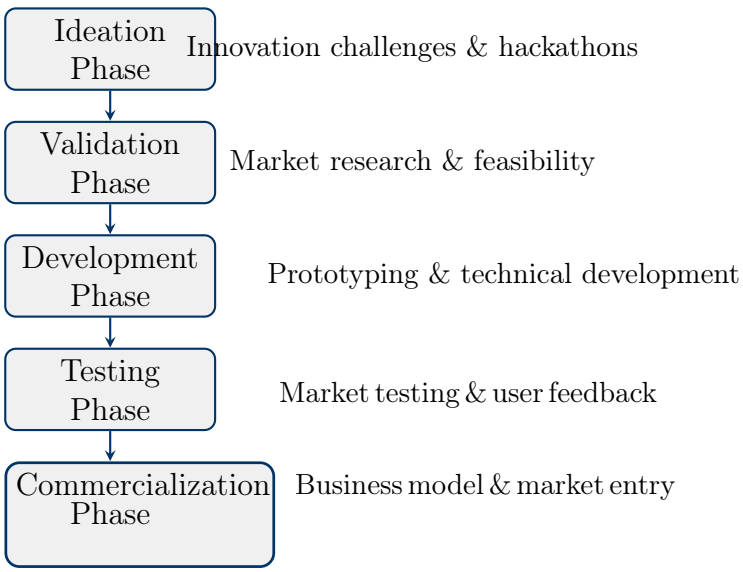

Figure 7.1: Systematic Innovation Process Flow

7.2 Entrepreneurship Education Integration

7.2.1 Curriculum Integration

1. Mandatory entrepreneurship course for all final year students
2. Innovation and IP management modules in core courses
3. Project-based learning with commercial viability assessment
4. Industry mentorship integration in academic projects

7.2.2 Skill Development Programs

- Design thinking workshops
- Lean startup methodology training
- Digital marketing and social media management
- Financial planning and investment readiness
- Legal and regulatory compliance training

Chapter 8

Services and Support System

8.1 Technical Support Services

lightgray **Service Category**	**Description**
R&D Support	Access to faculty expertise, graduate student assistance, industry collaboration facilitation
Prototyping Support	Rapid prototyping services, small-batch manufacturing guidance, supply chain development
Technology Transfer	Technology scouting, licensing negotiation, joint development facilitation

Table 8.1: Technical Support Services

8.2 Business Development Services

8.2.1 Market Research and Analysis

- Industry analysis and competitive intelligence
- Customer discovery and validation support
- Market sizing and opportunity assessment
- Business model development assistance

8.2.2 Financial Planning and Management

- Financial modeling and projection development
- Cash flow management training
- Investment readiness preparation
- Due diligence support for funding rounds

Chapter 9

IP and Product Ownership Rights

9.1 Ownership Determination Framework

lightgray **Category**	**Ownership Criteria**
Category A: Institute-Owned	• Developed using substantial institute resources (>50% of development cost) • Created as part of sponsored research projects • Developed during institute-funded research sabbaticals
Category B: Joint Ownership	• Developed using moderate institute resources (20-50% of development cost) • Created as part of academic curriculum with significant institute guidance • Faculty-student collaborative innovations
Category C: Individual/Team	• Developed without institute resources or during personal time • Created using publicly available information and personal resources • Independent research not related to institute activities

Table 9.1: IP Ownership Categories

9.2 Revenue Sharing Mechanisms

Institute-Supported IP Revenue Distribution

Institute share: 30-60% (based on resource contribution)
Inventor share: 40-70% (based on innovation contribution)
Department development fund: 10% (for future innovation support)

Chapter 10

Detailed Norms for Student Startups

10.1 Eligibility and Application Process

10.1.1 Eligibility Criteria

- Currently enrolled students in any program (UG/PG/PhD)
- Minimum CGPA requirement: 6.5 (relaxable based on innovation merit)
- Team composition: Maximum 50% external members allowed
- Prior innovation or project experience preferred

10.1.2 Application and Selection Process

1. **Online Application:** Comprehensive business plan submission through innovation portal
2. **Initial Screening:** Feasibility and innovation assessment by faculty committee
3. **Presentation Round:** 15-minute pitch to evaluation panel
4. **Interview Process:** Technical and business viability assessment
5. **Due Diligence:** Background verification and reference checks
6. **Final Selection:** IEC approval and formal acceptance

10.2 Academic Integration and Flexibility

10.2.1 Credit Transfer System

lightgray **Activity Type**	**Credits**	**Requirements**
Innovation Credits	2-4 credits	Prototype development with documentation
Entrepreneurship Credits	4-6 credits	Viable business plan development
Implementation Credits	6-8 credits	Actual startup launch and operation
Research Credits	4-8 credits	Technology development and IP creation

Table 10.1: Academic Credit System for Entrepreneurial Activities

10.2.2 Academic Substitution Options

- Major project replacement with startup development (with department approval)
- Industrial training substitution with startup internship
- Seminar replacement with business plan presentation
- Summer project substitution with market research or technology development

10.2.3 Attendance and Assessment Flexibility

- Minimum 60% attendance requirement (reduced from standard 75%)
- Alternative assessment methods for startup-engaged students
- Flexible examination schedules for critical startup activities
- Make-up class arrangements for missed academic content

10.3 Progressive Funding Structure

lightgray **Stage**	**Funding**	**Purpose**
Stage 1	Up to 25,000	Idea validation and initial research
Stage 2	Up to 1,00,000	Prototype development and testing
Stage 3	Up to 5,00,000	Market entry and initial operations
Stage 4	Up to 20,00,000	Scaling and expansion

Table 10.2: Progressive Funding Structure for Student Startups

Chapter 11

Detailed Norms for Faculty Startups

11.1 Faculty Startup Categories

lightgray **Type**	**Description**
Type A	Faculty-Led Individual Ventures: Single faculty member as primary founder with technology/expertise-based startup
Type B	Faculty-Student Collaborative Ventures: Faculty member as mentor/co-founder with student team
Type C	Multi-Faculty Consortium Ventures: Multiple faculty members from same or different departments
Type D	Faculty-Industry Partnership Ventures: Faculty expertise combined with industry resources

Table 11.1: Faculty Startup Categories

11.2 Time Allocation and Academic Responsibilities

lightgray **Time Allocation**	**Impact on Academic Responsibilities**
Up to 20%	No impact on academic responsibilities, normal workload
20-40%	Reduced teaching/administrative load with department approval
40-60%	Sabbatical arrangement with partial salary or unpaid leave
>60%	Extended leave with startup equity or revenue sharing arrangement

Table 11.2: Faculty Time Allocation Framework

11.3 Conflict of Interest Management

Prohibited Activities

- Using institute staff or resources for startup activities without formal agreement
- Accepting gifts or benefits from startup or partners
- Privileged information sharing between institute and startup
- Competition with institute services or programs

Chapter 12

Industry Integration and Mentorship Framework

12.1 Strategic Industry Partnerships

12.1.1 Partnership Categories

Tier	Description
Tier 1	Strategic Corporate Partners: Large corporations with significant innovation budgets
Tier 2	Technology Solution Partners: Mid-size companies seeking specific technology solutions
Tier 3	Startup Ecosystem Partners: Accelerators, incubators, and venture capital firms

Table 12.1: Industry Partnership Tiers

12.2 Comprehensive Mentorship Program

12.2.1 Mentor Categories

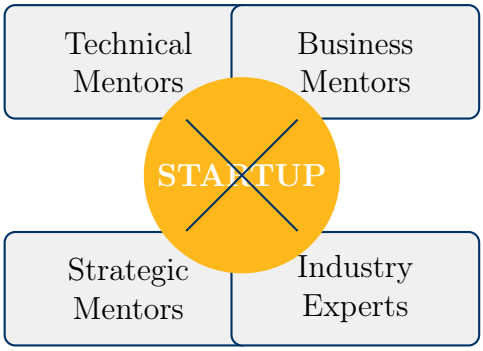

Figure 12.1: Mentor Network Structure

12.2.2 Mentor Engagement Framework

- **Weekly Sessions:** Regular 1-hour mentoring sessions for 6-month cycles
- **Monthly Reviews:** Comprehensive progress evaluation and strategic guidance
- **Quarterly Planning:** Long-term strategy development and milestone setting
- **Annual Assessment:** Mentor performance evaluation and program improvement

Chapter 13

Assessment and Evaluation Mechanisms

13.1 Comprehensive KPI Framework

13.1.1 Quantitative Metrics

lightgray **Indicator**	**Target**	**Measurement**
Patent applications filed annually	25+	Number count
Prototypes developed and tested	50+	Number count
Technology transfers and licensing deals	5+	Number count
Revenue from IP licensing	50 lakhs+	Financial value
Startups incubated annually	20+	Number count
Startup survival rate after 2 years	70%+	Percentage
Total revenue by incubated startups	2 crores+	Financial value
Employment created by startups	100+ jobs	Number count
Total funding raised by startups	10 crores+	Financial value
ROI on innovation fund investments	15%+	Percentage

Table 13.1: Key Performance Indicators

13.2 Evaluation Methodology and Timeline

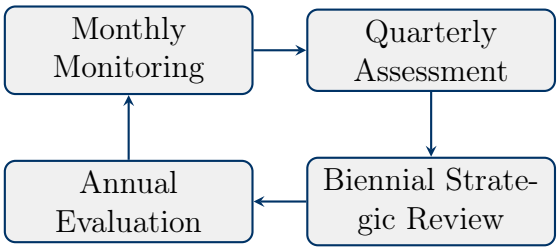

Figure 13.1: Evaluation Cycle

Chapter 14

Legal and Compliance Framework

14.1 Regulatory Compliance Management

14.1.1 Electronics and Technology Sector Compliance

lightgray **Compliance Area**	**Support Provided**
BIS Certification	Bureau of Indian Standards certification guidance and support
EMC/EMI Compliance	Testing and certification assistance for electromagnetic compatibility
FCC/CE Marking	Support for export-oriented products
ROHS Compliance	Environmental compliance for electronic products
WPC/TEC Approval	Telecommunication equipment type approval

Table 14.1: Electronics Sector Regulatory Support

14.2 Legal Structure and Documentation

14.2.1 Standard Legal Templates

- Non-disclosure agreements (NDAs) for various scenarios
- Technology licensing agreement templates
- Joint development and collaboration agreements
- Employment and consultant agreement templates
- Equity and investment agreement frameworks

Chapter 15

Risk Management and Exit Strategies

15.1 Comprehensive Risk Assessment Framework

lightgray **Risk Category**	**Assessment Areas**
Technology Risks	Technical feasibility, scalability, IP protection, quality control
Market Risks	Market validation, competitive analysis, customer acquisition
Financial Risks	Cash flow management, funding availability, operational costs
Regulatory Risks	Compliance requirements, policy changes, international regulations

Table 15.1: Risk Assessment Categories

15.2 Exit Strategy Framework

15.2.1 Successful Exit Pathways

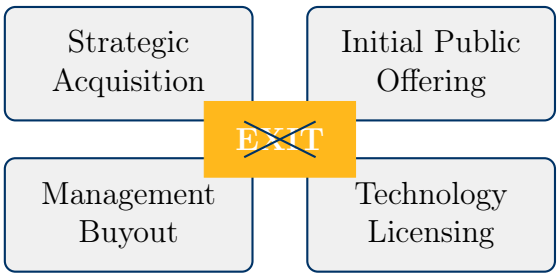

Figure 15.1: Exit Strategy Options

Chapter 16

Dispute Resolution Policy

16.1 Dispute Resolution Mechanisms

16.1.1 Internal Resolution Process

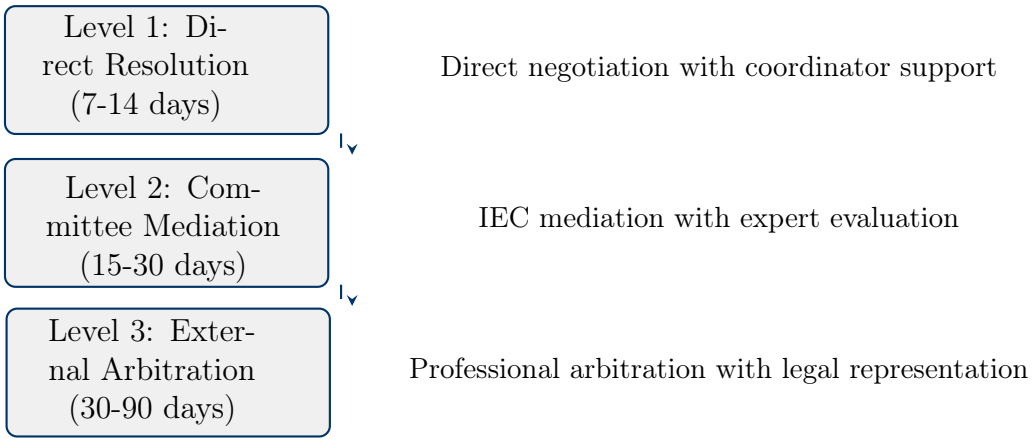

Figure 16.1: Dispute Resolution Process

16.2 Specialized Dispute Categories

lightgray **Dispute Type**	**Common Issues**
IP Ownership	Patent ownership conflicts, revenue sharing disputes, license violations
Startup Operations	Co-founder conflicts, equity disagreements, strategic decisions
Institute Relations	Resource usage conflicts, policy compliance, performance evaluations

Table 16.1: Common Dispute Categories

Chapter 17

Review Mechanism and Way Forward

17.1 Continuous Improvement Framework

17.1.1 Regular Review Cycles

lightgray **Review Type**	**Frequency**	**Focus Areas**
Operational Reviews	Monthly	Service quality, stakeholder feedback, issue resolution
Strategic Reviews	Quarterly	Policy effectiveness, financial performance, strategic adjustments
Comprehensive Reviews	Annual	Complete ecosystem evaluation, external benchmarking
Policy Overhaul	Biennial	Fundamental framework evaluation, long-term strategic planning

Table 18.1: Review Framework

17.2 Future Vision and Expansion Plans

17.2.1 Strategic Vision Timeline

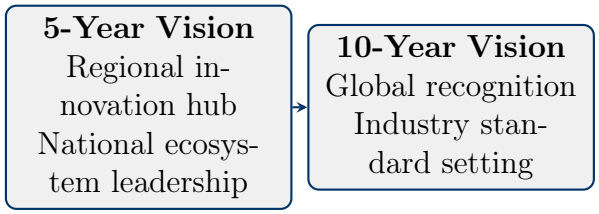

Figure 17.1: Strategic Vision Timeline

Conclusion

This comprehensive Innovation and Startup Policy represents MVIT's commitment to fostering a world-class entrepreneurship ecosystem that creates meaningful economic and social impact. The policy framework provides structured support for innovation and entrepreneurship while maintaining academic excellence and institutional integrity.

Key Success Factors

- **Stakeholder Commitment:** Collective engagement of students, faculty, staff, industry partners, and alumni
- **Systematic Implementation:** Phased approach with clear milestones and accountability
- **Continuous Improvement:** Regular assessment and adaptation based on feedback and results
- **Resource Optimization:** Efficient utilization of financial, human, and infrastructure resources
- **Impact Measurement:** Focus on measurable economic and social outcomes

The success of this policy depends on the collective commitment of all stakeholders working together to create an environment where innovation thrives and entrepreneurs are nurtured to solve real-world problems.

Through systematic implementation, continuous improvement, and stakeholder engagement, MVIT aims to become a leading institution in innovation and entrepreneurship, contributing significantly to India's startup ecosystem and economic development.

Policy Information	Details
Effective Date	
Next Review Date	
Policy Version	2.0 (Enhanced Edition)
Approved By	Innovation and Entrepreneurship Council, MVIT
Contact Information	iic.mvit@gmail.com

This policy document supersedes all previous versions and will be reviewed annually for updates and improvements.

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