

STPI SkillUp - Operational Guidelines

A Reskilling/Upskilling Initiative in Emerging Technologies by STPI



January 2026

Software Technology Parks of India (STPI)

Vision

To empower a future-ready talent pool of engineering graduates & IT professionals through a reskilling/upskilling initiatives with industry-relevant skills in emerging technologies through structured, practical, and collaborative learning experiences.

Objective

India's IT industry has driven economic growth for over three decades, contributing to national GDP and creating millions of jobs, with STPI playing a pivotal role in this transformation. As emerging technologies like Artificial Intelligence, Machine Learning, IoT, Blockchain, AR/VR, Cybersecurity, and more create unprecedented demand for skilled professionals in the coming decade, a critical talent gap persists, particularly in Tier-2 and Tier-3 cities.

The Government of India has recognized this critical need. The National Education Policy 2020 emphasizes application-based learning and practical skill development. STPI's one of the objectives is to facilitate specialized training in niche areas to meet its mandate, which includes fostering a conducive environment for entrepreneurship. Accordingly, STPI has been actively pursuing opportunities for specialized upskilling and reskilling programs focused on emerging technologies, leveraging its pan-India infrastructure to deliver industry-aligned training programs.



“STPI SkillUp”

STPI’s initiative for building India’s Next-Generation Tech Talent Pool

The “STPI SkillUp” is a pan-India reskilling and upskilling initiative in emerging technologies, led by STPI, aimed at developing a highly skilled and employable workforce.

Targeting engineering graduates and IT professionals, the initiative focused on industry-led, structured training programs through training partners – SAHAYAKs ranging from a 6-week foundation program to a 24-week advanced program.

These programs will be designed with input from industry & academia to address the evolving needs of the technology sector and bridge the gap between academic knowledge and industry-required practical skills. By combining theoretical foundations with practical, hands-on experience, the initiative equips participants with real-world problem-solving skills that surpass conventional academic learning.

“STPI SkillUp” leverages the STPI ecosystem, including infrastructure comprising 68 centres and 24 centres of entrepreneurship (CoEs), as well as a strong network of industry, startups, and academia.

The initiative prioritizes participants from Tier-2 and Tier-3 cities to promote balanced growth in the IT sector, unlock regional potential, expand opportunities for technical skills, and enhance India's global competitiveness.

India’s technology sector is evolving rapidly, with significant opportunities for professionals in the following high-impact domains:

- **AI/Data Science:** Powers innovative systems and analytics across sectors, Drives innovation by turning complex data into actionable insights. Demand for experts in machine learning, NLP, and AI-driven applications is rising.
- **Blockchain/FinTech:** Secures digital transactions and enables decentralized applications, transforming banking and payments with digital innovation. Blockchain architects and developers are needed for fintech, supply chain, and identity solutions.
- **Medical Technology (Medtech):** Advances healthcare with connected devices and digital platforms. Needs professionals in health informatics, data integration, and device connectivity.
- **Cybersecurity:** Protects data and digital infrastructure. There is a critical shortage of cybersecurity analysts and experts.
- **Electric & Autonomous Vehicles (EV/AV):** Shapes the future of mobility. Opportunities for engineers in battery tech, software, and autonomous systems.
- **3D Printing:** Redefines manufacturing and prototyping. Skilled designers and operators are essential for industrial and medical applications.
- **IoT & Industry 4.0:** Connected systems that enhance efficiency through predictive maintenance and real-time supply chain optimization. Significant requirement for a workforce skilled in automation technologies.

The said domains are creating new jobs, transforming traditional roles, and opening pathways for entrepreneurship. As adoption accelerates, building a workforce with foundational and specialized skills is imperative.

Expected Impact :

- Create a sustainable, scalable talent pipeline that transforms unemployed and underemployed graduates and IT professionals into industry-ready professionals.
- Bridge the skills gap between academia and industry through practical, hands-on training in emerging technologies
- Equip Engg. graduates & IT professionals with competencies aligned with current and future market demands
- Increase the employability of engineering graduates
- Create a standardized, quality-assured training delivery model across 68 STPI Centers nationwide
- Establish institutional partnerships with colleges for effective outreach and student mobilization
- Enable technology sector competitiveness in global markets
- Foster innovation and entrepreneurship among youth
- Enable balanced regional IT ecosystem development beyond metros, including Tier II/III cities

Reach & Scale

- **Delivery Model:** Structured 6-24 weeks cost-based reskilling/upskilling programs across emerging tech through STPI's 68 Centers pan India
- **Target Audience:** Engineering graduates and IT professionals from Tier-2/3 cities
- **Quality Assurance:** Centralized governance & monitoring through a dedicated portal, curriculum validation, industry partnership for mentorship and placement support
- **Placement Support:** Resume prep, job matching, employer engagement, placement tracking
- **Scale:** Reskill/upskill 1000-1200 trainees in 2026, with the scaling target to 20-25 thousand in the next five years (2026-2030).

Major USPs:

- Co-designed curriculum with inputs of industry and academia for real-world relevance
- Focused on practical, hands-on training (minimum 30% labs, 20% projects)
- Balanced pan-India courses addressing regional talent gaps
- Sustainable financial model with performance-linked disbursements to training partners

Key objectives of the Initiative



Sustainable Talent Pipeline

Create a sustainable, scalable talent pipeline that transforms unemployed and underemployed graduates, IT professionals, into industry-ready professionals.



Bridge Skill Gap

Bridge the skill gap between academia and industry through practical, hands-on training in emerging technologies



Industry-Aligned Competencies

Equip Engg. graduates & IT professionals with competencies aligned with current and future market demands



Increase Employability

Increase employability of engineering graduates



Quality-Assured Training

Create standardized, quality-assured training delivery model across 68 STPI Centers nationwide



Institutional Partnerships

Establish institutional partnerships with colleges for effective outreach and student mobilization



Industry-led programs

Trailer courses with industry & academia feedback, ensuring practical knowledge and real-world problem-solving skills



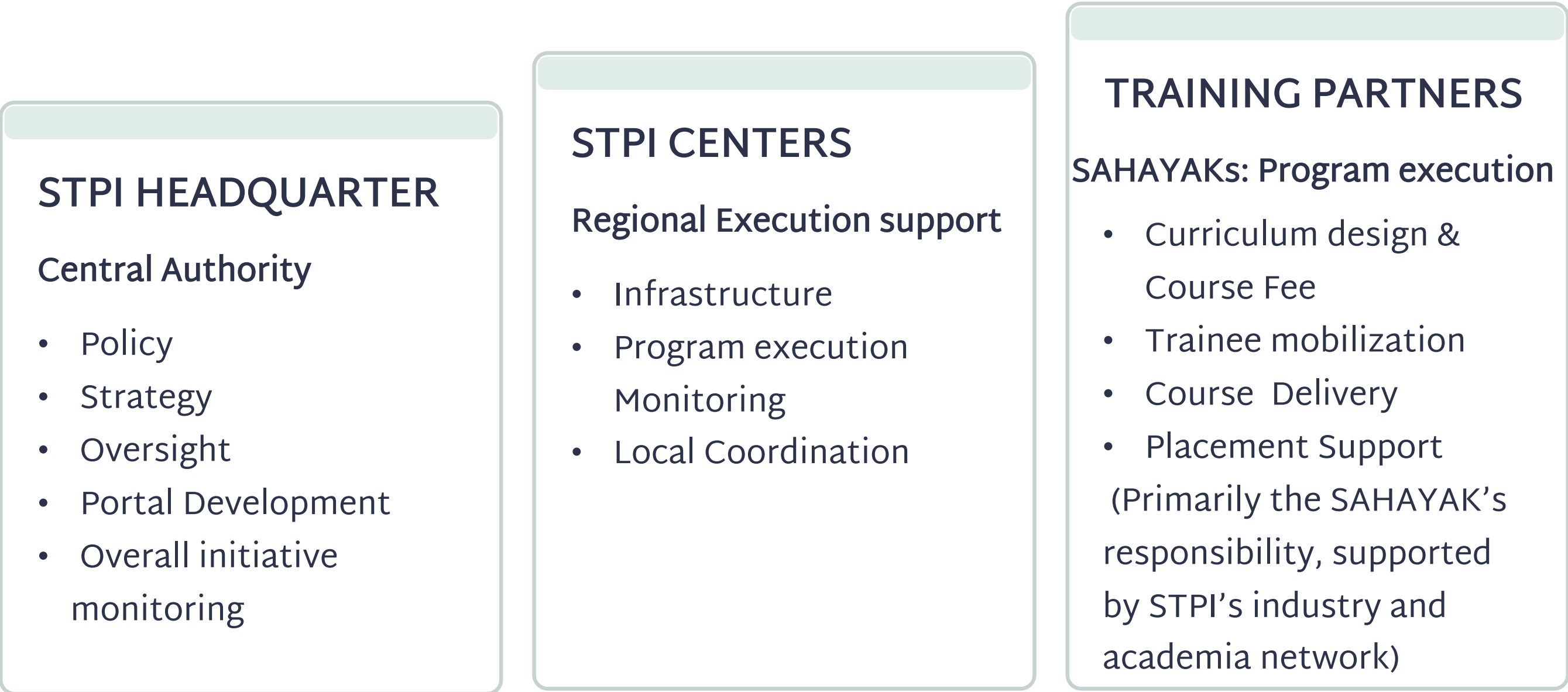
Expected Outcome

Aims to train 1,000–1,200 participants in the first year, and 20,000–25,000 over the next five years.

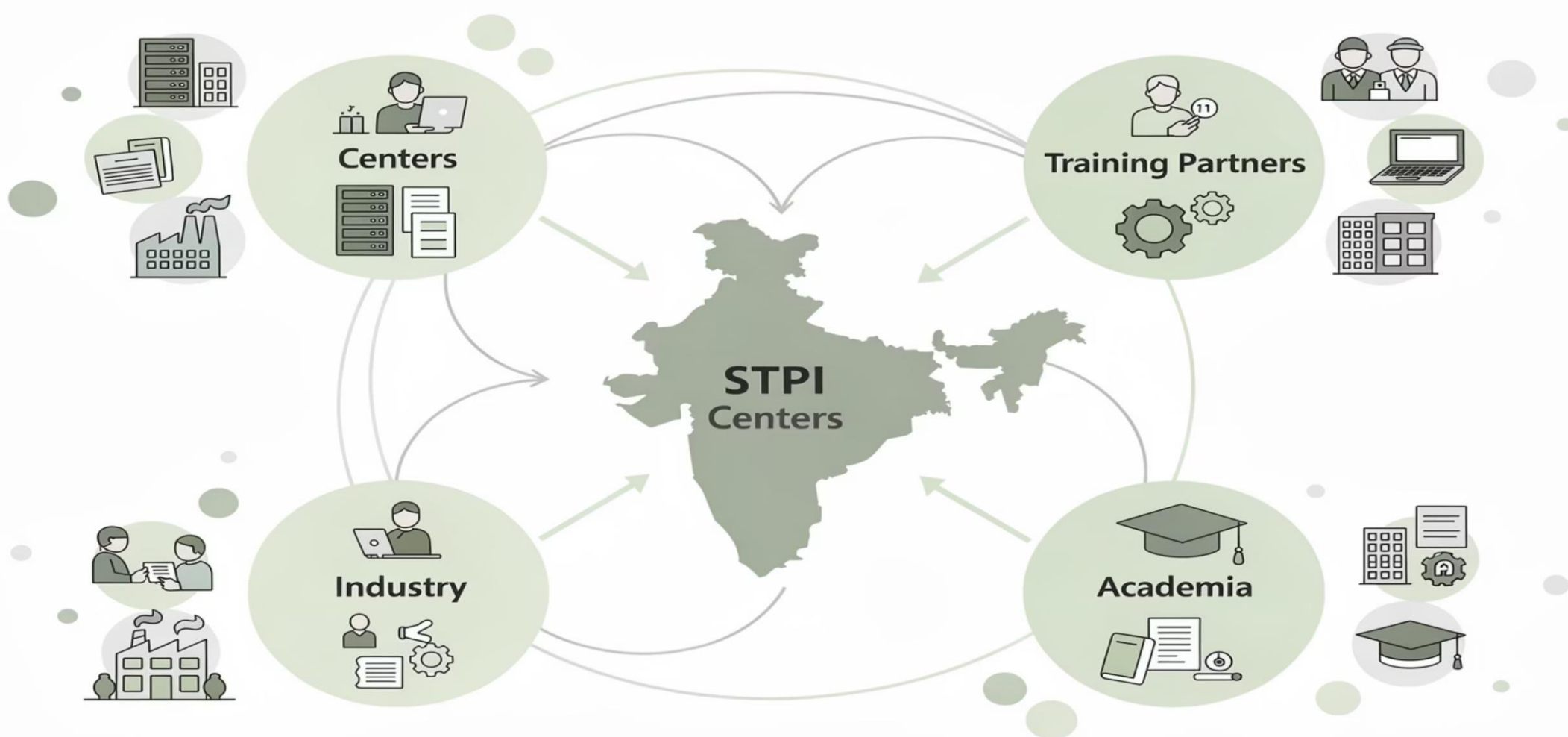
“STPI SkillUp” represents a strategic assurance to advancing India’s technological workforce. By incorporating industry-aligned curricula, emphasizing emerging technologies, and implementing a nationwide delivery framework, the initiative addresses both the skills deficit and regional disparities within the IT sector. The program aims to train 1,000–1,200 participants in the first year, to scale to 20,000–25,000 participants over the next five years. It aspires to catalyze inclusive growth, employment generation, and enduring competitiveness, thereby supporting India’s objective to assume a leading role in the digital economy.

Operational Structure

The STPI SkillUp initiative operates on a three-tier governance model designed to ensure centralized policy oversight, regional coordination, and effective on-ground implementation. This structure balances central control with operational flexibility at the local level.



Strategic Advantages



Key Committees & Their Roles

The governance guidelines operate through three specialized committees, each with defined authority and responsibility:

STEERING COMMITTEE at STPI HQ

- a) Composition:** 3-5 senior level officials of STPI HQ (Technical, Finance, Administration heads)
- b) Role:** Policy/framework/Guidelines creation and time to time review for further revision if required, annual plans, higher level program progress review, strategic decisions etc.

PROGRAM COMMITTEE at STPI HQ

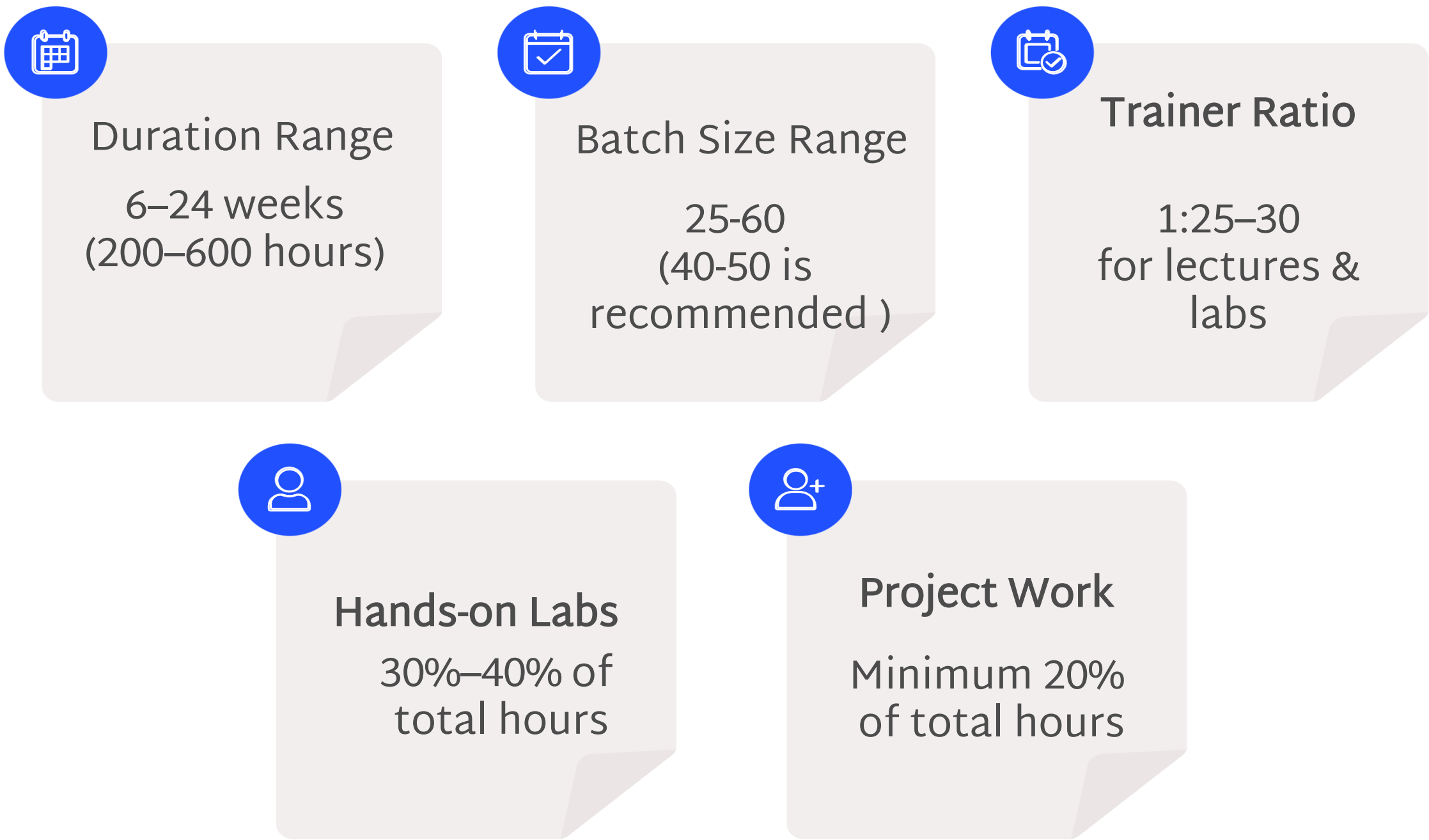
- a) Composition:** 3-4 STPI HQ members (Technical, Finance, Administration Division)
- b) Role:** Central monitoring of all programs and initiatives progress/performance. Review & approval of proposals that are not in line with operational guidelines, recommend competent authority approval, Rolling Empanelment of SAHAYAK etc.

PROGRAM EXECUTION COMMITTEE (Directorate Level)

- a) Composition:** Representatives from STPI Directorate/Center, STPI HQ, Academia, Industry (5-7 members)
- b) Role:** SAHAYAKs selection, review proposals, curriculum validation, coordination for program execution, validate against policy guidelines, Course Fee approval, rolling empanelment of Sahayak, coordination of program, quality monitoring training, placement support, outreach coordination, continuous improvement through corrective actions, recommendations to steering committee & program committee at HQ as and when required

Program Design & Curriculum Standards

Minimum Quality Standards



Based on above standards following programs are proposed

Foundation Programs	Intermediate Programs	Advanced Programs
Duration: 6-8 weeks	Duration: 12-14 weeks	Duration: 20-24 weeks
Hours: ~200 hours	Hours: ~300 hours	Hours: ~600 hours
Schedule: 3-5 hours daily, 4-5 days/week	Schedule: 4-5 hours daily, 5 days/week	Schedule: 5-6 hours daily, 5 days/week

Batch Commencement Schedule:

- New batches commence from the first week of any month, subject to readiness confirmation.
- Training partners must provide readiness confirmation 2 weeks prior to batch start.
- Registration deadline is 7 days before training begins, with orientation conducted 1 day before commencement.

Course Content Standards

The curriculum will be structured around at least four major modules that progress from foundational concepts to advanced application and independent project work.



Foundation & Prerequisites

Basic concepts, foundational knowledge, essential prerequisites, mathematics review, environment setup

Core Concepts

Main technology topics, theoretical foundations, industry standards, hands-on labs with practical exercises



Advanced Topics

Advanced techniques, optimization methods, real-world case studies, complex problem-solving scenarios

Capstone Project

Full-scale implementation, end-to-end solution development, presentation, portfolio creation

Industry Alignment Requirements

1	Co-Design Process Training partners must co-design curriculum with STPI's program execution committee alongside at least two active industry experts and academia representatives
2	Quarterly Reviews Regular quarterly reviews with industry to ensure continued relevance and alignment with market demands
3	Job Role Alignment Content must align with actual job role definitions, required competencies, and current market demands
4	Technology Integration Programs must incorporate the latest tools, technologies, and emerging trends in the field

5-Year Targets and Expansion Roadmap

Below are the five-year (yearly and cumulative) targets, alongside the strategic focus for each period.



This phased approach ensures a controlled yet aggressive expansion, allowing for continuous refinement and adaptation based on market feedback and operational efficiencies. Each phase is critical to building a sustainable and impactful training ecosystem.

Year 1 Program Launch Plan (2026)

Following is the proposed plan to launch programs across various locations, specialized domains, and their respective batch sizes.

S.No	Location	Domain	Batch Size
1	Lucknow	MediElectronics & Health Informatics	40
2	Thiruvananthapuram	Cybersecurity	25
3	Bengaluru	IoT	30
4	Bengaluru	Cybersecurity	30
5	Pune	Electric Vehicles (EV)	30
6	Bhubaneswar	AI/ML/DA/DS or Cybersecurity	30
7	Bhubaneswar	3d Printing	40
8	Mohali	Cybersecurity	40
9	Mohali	AI/ML/DA/DS	40
10	Gandhinagar	Fintech	25
11	Deoghar	AI/ML/DA/DS	30
12	Gurugram	Blockchain	50
13	Noida	Cybersecurity	40
14	Guwahati	IOT in Agriculture	30
15	Kolkata	AI/ML/DA/DS or Cybersecurity	40
Total			520

For 2026, it is projected that each course will run at least twice, doubling the total annual target for these programs to 1040 trainees.

Key First-Year Program Insights

12

Unique Locations

Spanning diverse regions.

10

Specialized Domains

Targeting high-demand fields.

520

Initial Batch Capacity

Per program run.

1040

Annual Capacity

Projected for 2026 (twice per course).

Program Implementation lifecycle

The STPI SkillUp program follows a structured **9-stage implementation model**, from initial demand identification through post-program evaluation. Each stage has defined timelines, deliverables, approval mechanisms, and success criteria. This systematic approach ensures consistency, quality, and accountability across all programs and centers.

Stages to be undertaken prior to the launch/commencement of the training course over a duration of around 4–8 weeks.

Stage 1	Stage 2	Stage 3
DEMAND IDENTIFICATION	PRE-IMPLEMENTATION SETUP	APPROVAL
Duration: 1-2 weeks	Duration: 2-4 weeks	Duration: 1-2 weeks
STPI Centers/Training partners identify local training needs based on industry requirements, learner interest, technology domain demand, and geographic skill gaps.	Training partner and STPI Center conducts readiness of infrastructure, curriculum vetting and prepare final proposal for approvals of authorized committees.	STPI HQ reviews the proposal and provides approval to center.

Stages 4 to 9 to be undertaken during the execution of the training course over a duration of approximately 21–42 weeks.

Implementation Stages 4-9

STAGE 4	OUTREACH, APPLICATION INVITATION AND SELECTION OF CANDIDATES Duration: 2-4 weeks • Training partner with STPI support will conduct the outreach program • Application shall be invited through STPI’s SkillUp portal. Aptitude test, interview etc. for selection of candidates may be done online through STPI SkillUp portal or physically at centers. • All communication, publicity, and documentation must adhere to STPI's branding and communication guidelines. • Press releases, social media posts, and outreach campaigns must be from both STPI and Training partner's social media Handlers. • Uniform branding and outreach material shall be designed and used for course materials, digital collaterals etc.
STAGE 5	BATCH COMMENCEMENT Duration: 1 day Learner registration and verification, orientation session, first formal training session, and baseline assessment.
STAGE 6	TRAINING DELIVERY & MONITORING Duration: 6-24 weeks Live training sessions, hands-on labs, project facilitation, continuous assessment, mentorship, and weekly progress reporting.
STAGE 7	ASSESSMENT & CERTIFICATION Duration: 1-2 weeks Continuous assessment (40%), final assessment (60%), certification preparation, and certificate issuance.
STAGE 8	PLACEMENT SUPPORT Duration: 8 weeks Resume review and optimization, mock interviews, job matching, employer engagement, and placement tracking.
STAGE 9	POST-PROGRAM EVALUATION Duration: 4 weeks Learner satisfaction surveys, trainer performance evaluation, impact assessment, and continuous improvement planning.

Financial Model

The “STPI SkillUp” initiative is self-sustaining—students pay fees to STPI, which shares revenue transparently with training partners based on clear milestones. Where possible, CSR or government support will be leveraged to reduce fees, making the program both accessible and financially robust.

Course Fee:

The course fee shall be market-driven and proposed by the training agencies (SAHAYAKs) based on factors such as course duration, batch size, trainer expertise, curriculum depth, and alignment with industry requirements. As the courses are delivered under the STPI banner, the proposed fee shall be feasible, viable, and consistent with prevailing market standards. In cases where the proposed fee exceeds market benchmarks, the training agency shall clearly demonstrate the value proposition and assume responsibility for participant mobilisation and placement outcomes. All course proposals, including curriculum and fee structure, shall be subject to vetting and approval by the Program Committee.

Revenue Sharing Structure:

The respective STPI center shall serve as the nodal agency for collecting of all course fees through the designated STPI SkillUp web portal. All expenses and the collected funds for a training program shall be booked under the budget head "Training & Capacity Building".

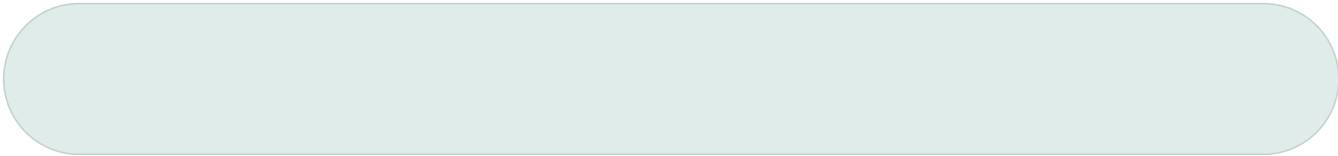
STPI Centre Retention: (30% or more)

As revenue – Infrastructure, assessment, certification, administration, and institutional overheads

SAHAYAK (Training Partner) Share: (Remaining share of the revenue)

As expenses – Faculty remuneration, course development, course execution, trainees mobilization and placement support etc.

Disbursement of share of revenue to training partners is structured in four tranches, each tied to specific, measurable milestones. This ensures both accountability and progressive funding:

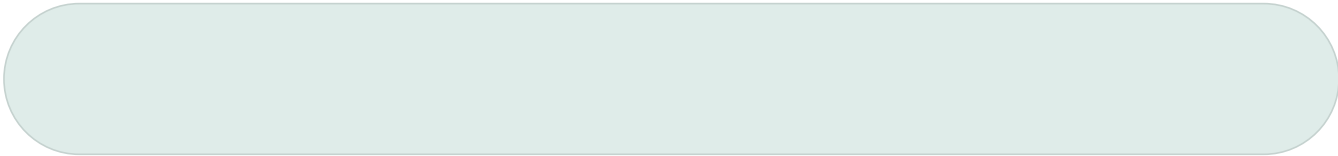


Tranche 1: 10% Payment

Trigger: Program commencement

Conditions: Advance Payment

Timeline: After Program commencement

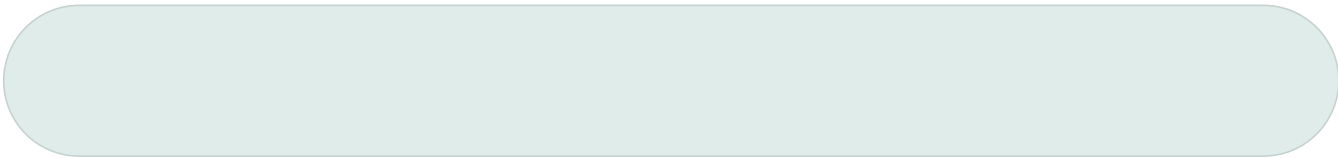


Tranche 2: 30% Payment

Trigger: 40% of training hours completed

Conditions: Sustained 75%+ attendance, mid-term evaluation passed, no escalations

Timeline: 5-7 days after milestone achievement

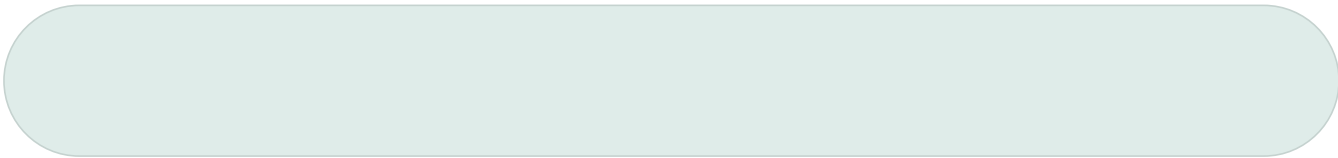


Tranche 3: 30% Payment

Trigger: All training hours delivered + assessment conducted

Conditions: 100% hours delivered, assessment completed, final reports submitted

Timeline: 5-7 days after submission and verification



Tranche 4: 30% Payment

Trigger: Post-training period completion (60 days) + placement report

Conditions: Placement tracking completed, outcome report submitted, final compliance verified

Timeline: 5-7 days after documentation received

Each milestone payment requires specific supporting documentation including attendance records, learner performance summaries, quality compliance checklists, and photographic/video evidence samples.

Rolling Empanelment of SAHAYAK's

Any additional agencies may be empanelled in accordance with the provisions of the Rolling Empanelment of SAHAYAKs as stipulated in the Operational Guidelines, which is in line with the EOI (Ref: STPI/HQ/TECH/NSIG/TRNG/25-26/2).

- The Agency must be a registered legal entity in India as a private limited company, limited liability partnership, not-for-profit organization, registered society or association. Any other suitable structure which is legally valid shall also be acceptable.
- The Agency must not be blacklisted by any Central/State Governments or allied organizations including Autonomous Bodies, PSUs etc.
- The Agency must itself be the Subject Matter Expert (i.e. “Outsourcing” is NOT permitted).
- The Agency should be in existence for at least 3 years and have experience in designing and delivering technology training programmes with at least 100 individuals trained. Further, the Agency must have a minimum average annual turnover of INR 10 Crore during the last 3 years.

Agencies meeting the above-mentioned criteria shall be evaluated and awarded scores by the PROGRAM COMMITTEE at STPI HQ as follows :

Sl. No	Evaluation Criteria	Description	Maximum Score
1	Faculty Expertise & Team Composition	Qualifications, certifications, hands-on experience and availability of subject-matter experts in-house	10
2	Past Experience & Client Feedback	Track record in similar programmes, participant outcomes, testimonials and case references	20
3	Physical presence	Physical presence in the location opted for	10
4	Certifications & Accreditations	Relevant ISO certification (9001:2015, 21001:2018, 29990:2010, 45001:2018 etc)	4
		Any other valuable certification or accreditation (EDI/ NSDC/ State Skill Mission/ Sector Skill Council)	6
5	Utilization of STPI's Infrastructure	Plan for leveraging STPI CoE resources, hardware/software provisioning and lab-session logistics	10
6	Technical Presentation	Overall quality of proposal pitch, clarity of delivery, demonstration of methodology, response to queries	20
6.1 Curriculum Design & Relevance		Depth of modules, alignment with industry needs, inclusion of case-studies and capstone projects specific to the locations & technologies opted for	10
6.2 Pedagogical Methodology		Blend of classroom, virtual and hands-on delivery; innovative instructional techniques specific to the locations & technologies opted for	10
Total Score (Maximum)			100

STPI shall call only those Agencies for presentation which are found competent enough.

Quality Assurance & Monitoring Standards

The STPI SKillUp initiative maintains rigorous quality standards across all programs. These five core standards form the foundation of quality assurance, with each standard having measurable criteria for success.

 Standard 1: Learning Needs Assessment Curriculum must be aligned with assessed market demand. Job role analysis conducted with minimum 2 industry partners. Skill gaps identified and documented. Learner demographic analysis performed. Success Criterion: Industry validation documented before program commencement.	 Standard 2: Target Audience Definition Clear eligibility criteria defined and publicized. Learner profile documented. Prerequisites specified. Diversity targets established. Success Criterion: At least 80% of learners match defined profile.	 Standard 3: Learning Objectives Clear, measurable learning outcomes defined. Outcomes aligned to job roles and industry competencies. Outcomes progress from basic to advanced. Mapped to NSQF levels where applicable. Success Criterion: All learners achieve 80%+ of stated outcomes.
 Standard 4: Content & Structure Content logically sequenced from basic to complex. Content is current and industry aligned. Content includes theory, practical, and real-world applications. Content reviewed and updated annually. Success Criterion: Industry validation plus 90%+ learner relevance feedback.	 Standard 5: Instructional Design & Delivery Multiple delivery modalities employed. Blended learning approach (60%+ live, 40% self-paced acceptable). Engagement strategies include discussions, projects, and peer learning. Accessibility features included. Success Criterion: 85%+ learner engagement in activities.	 Standard 6: Facility Qualification Minimum qualification : Graduation Minimum Experience : 100 hours in relevant domain

Reporting & Review Mechanism

- Monthly progress reports to be submitted to STPI center by Sahayak.
- Quarterly review by the Program Committee of overall progress report submitted by STPI center.
- Key Performance Indicators (KPIs):
 - Learner enrolment and completion rate.
 - Satisfaction level and feedback scores.
 - Placement percentage.
 - Adherence to timelines and budget.

Conclusion

The “STPI SkillUp” initiative demonstrates STPI’s commitment to transforming India's youth into a skillful, future-ready tech workforce. Through rigorous quality standards, a transparent and self-sustaining financial model, and a milestone-driven training framework, we are bridging the gap between academic knowledge and the evolving demands of the industry. This program is not just about upskilling; it is about igniting potential, fostering innovation, and ensuring every talented individual can contribute to the nation's digital evolution.

In conclusion, with the support of all stakeholders, i.e., educational institutions, industry partners, training agencies, and aspiring learners, STPI’s vision is to cultivate a vibrant ecosystem where talent thrives and innovation flourishes.



Empower Talent

Provide India's youth with the skills needed to excel in emerging tech fields.



Bridge Industry Gaps

Align academic training directly with critical industry demands and future trends.



Drive National Growth

Contribute to a robust, innovative economy through a skilled workforce.



Foster Collaboration

Unite academia, industry, and government for collective impact.

