

I-STEM Industry Convergence Program

Edition–1: South India

Co-creating India's Testing & Innovation Backbone with Industry

1. Why This Program — From Industry Reality

Across sectors—manufacturing, electronics, EV, biotech, materials, and deep-tech startups—industry faces a persistent and operational problem:

Testing, validation, and certification are not reliably accessible when needed.

Despite the presence of advanced infrastructure across academic and research institutions:

- Access is inconsistent and relationship-driven
- Pricing varies widely across institutions with no benchmarks
- Turnaround time is unpredictable
- Equipment availability and readiness are unclear
- Support, interpretation, and accountability are limited

As a result, industry today spends:

- More time validating than building
- More money accessing than innovating
- More effort navigating systems than solving real problems

This is not a capability gap.

It is a **system design gap**.

This programme is designed to correct that—by starting from **industry experience, not institutional assumptions**.

2. What This Program Does — A Working Platform, Not an Event

This is not a conference.

This is not a consultation.

This is a **structured working platform** where industry directly shapes how scientific infrastructure will function.

Through this programme, industry will:

- Define **what infrastructure is actually needed**
- Establish **acceptable pricing and turnaround benchmarks**
- Identify **critical gaps in testing, certification, and access**
- Surface **real operational pain points and inefficiencies**
- Enable **revival and prioritization of high-value equipment**
- Shape **deployment of ACMC hubs aligned to demand**

Most importantly:

Industry moves from being a user of the system → to a co-architect of the system

3. What We Will Solve Together (Structured Inputs)

This programme captures **real operational intelligence from industry**, not generic feedback.

A. Testing & Access

- Which tests are critical but difficult to access?
- Where are delays directly impacting production or delivery?

B. Pricing & Turnaround Reality

- What do you pay today vs what is viable?
- What turnaround time is operationally acceptable?

C. Certification & Compliance

- Which standards (BIS/ISO/ASTM/EMI–EMC/export) are hard to access?
- Where do current labs fall short?

D. System Friction

- Where does the process break?
- What causes delay, rejection, or rework?
- Why do you avoid public labs today?

E. Infrastructure Gaps & Revival

- Which instruments are in demand but unavailable?
- Which existing infrastructure can be revived and used?

4. What Industry Gets — Immediate Value

This programme is designed to deliver **tangible, near-term value**, not long-term promises:

- **Priority access pathways** to relevant labs and facilities
- A curated list of **A-category, ready-to-use equipment across institutions**
- Identification of **trusted, reliable testing partners**
- Opportunity to **negotiate realistic, feasible pricing frameworks with institutions**
- Direct linkage to **academic labs, operators, and technical experts**
- Visibility into **upcoming APMC hubs aligned to your demand**

5. What Happens with Your Inputs (Action Layer)

This is not a feedback exercise. It is an **execution pipeline**.

Your inputs will directly drive:

- **Revival of dormant high-value equipment**
- Deployment of **APMCs (Accreditation Catalyst Model Centers)**
- Creation of **industry-aligned testing hubs**
- Standardization of **pricing and turnaround benchmarks**
- Development of a **real-time industry demand database**
- **Policy inputs to Government of India and national stakeholders for action**

Additionally:

- A **validated industry report** will be shared with policymakers
- Institutions will be aligned to provide **real-time or near-real-time access to key equipment**
- Structured engagement will enable **pricing rationalization discussions with academia**

6. A New Model: From Collaboration to Integration

This programme moves beyond traditional “collaboration”.

It enables:

- **Industry presence within academic ecosystems** (on-campus engagement)
- Continuous, not one-time, interaction
- Co-development of solutions with researchers and operators

From *collaboration* → **integration**

7. Governance Backbone

To ensure this system works in practice:

- **Institutional SPOCs (Single Point of Contact) will be mandated**
→ One accountable interface for industry
- Infrastructure will be supported through:
 - **Performance tracking (uptime, utilization, turnaround)**
 - **Dashboard-based visibility**
 - **Policy-backed access frameworks**

This ensures industry engagement is:
structured, accountable, and scalable

8. The Outcome: A System That Finally Works for Industry

The goal is simple:

To build a system where:

- Testing is **accessible, predictable, and affordable**
- Pricing is **transparent and comparable**
- Infrastructure is **aligned with real demand**
- Labs function as **service systems, not isolated facilities**
- Industry can focus on **innovation—not access challenges**

9. Why Your Participation Matters

This is the first structured effort to build a **national industry demand layer for scientific infrastructure**.

Without industry participation:

- systems remain supply-driven
- infrastructure remains underutilized

With your participation:

- infrastructure becomes **demand-driven**
- systems become **usable, reliable, and industry-ready**

10. Closing Note

This is not about improving access.

This is about **redesigning the system with industry at the centre**—supported by policy, aligned with demand, and accountable in execution.

If the system is built with you, it will work for you.