
“INNOVATION Center of Excellence for Consultancy (ICEC)

@ Electronics & Telecommunication Department”

at **Symbiosis Institute of Technology (SIT), Symbiosis International (Deemed University)**

Initiative by **Dr. Bhavana Ambudkar & Dr. Pritesh Shah**

in collaboration with **WIFI Foundation NPO for Women Entrepreneurs**.

PROPOSAL DOCUMENT

INNOVATION CENTER OF EXCELLENCE FOR CONSULTANCY (ICEC) in ETC Department (**Transforming Research & Innovation into Revenue Generation INR 24–66 Cr in 3 Years**)

Electronics & Telecommunication Department – SIT Pune In Collaboration with

WIFI Foundation NPO for Women Entrepreneurs (*Every Venture must include **at least one Woman Designated Partner** to ensure inclusive leadership and eligibility for all ecosystem benefits.*)

WIFI Foundation NPO for Women Entrepreneurs envisions a transformative entrepreneurial movement aligned with VISION VIKSIT BHARAT, as well as the regional goals of VISION VIKSIT Kokan, Vidarbha and Marathwada. In harmony with NEP 2020—which emphasizes innovation, experiential learning and entrepreneurship—and key UN SDGs such as SDG 4 (Quality Education), SDG 5 (Gender Equality), SDG 8 (Decent Work & Economic Growth) and SDG 9 (Industry, Innovation & Infrastructure), the Foundation aims to create a future-ready entrepreneurial ecosystem ensuring 100% Employability through innovation-driven Startups and MSMEs.

Each startup incubated under the WIFI Foundation ecosystem is built to generate an average of 16 jobs, creating a strong multiplier effect that strengthens local economies, reduces outward migration and promotes balanced regional development. With a firm belief that real entrepreneurship is cultivated best by experienced businesspersons, the Foundation offers practical mentorship, strategic handholding and sustainable business pathways that convert ideas into revenue-generating ventures.

By mandating one Woman Entrepreneur in every startup, the Foundation promotes inclusive development where SHEmpower becomes a driving force for community and economic transformation. Through business clusters, angel investment networks, consultancy excellence centers and statewide incubation models, WIFI Foundation is building a self-reliant, employment-generating and globally competitive Bharat, advancing India's mission toward becoming a developed nation by 2047.

1. Executive Summary

Symbiosis Institute of Technology (SIT), Pune—through the leadership of **Dr. Pritesh Shah**, globally recognised among the **World's Top 2% Scientists (Stanford/Elsevier)** and **IEEE Senior Member**, and **Dr. Bhavana Ambudkar**, Innovation Officer & Head of EPIC Cell—proposes to establish a first-of-its-kind **Innovation Center of Excellence for Consultancy (ICEC)** within the Electronics and Telecommunication Department.

The objective is to **transform the department's research capability, laboratories, design clubs, and innovation ecosystem into industry-ready consultancy, commercialization, and revenue-generation engines**.

This ICEC will be launched in strategic partnership with **WIFI Foundation NPO**, a pan-Maharashtra entrepreneurship & incubation movement aligned with **Vision Viksit Bharat 2047, NEP 2020**, and **UN SDGs**.

The ICEC shall generate **INR 10–50 Crore consultancy + Venture revenue within 3 years**, enabled by a **50% Equity-based Revenue Sharing Model** to build seed money and sustainability for SIT's innovation ecosystem.

2. Vision & Mission of the ICEC

Vision

To transform SIT's Electronics & Telecommunication Department into a **nationally benchmarked consultancy powerhouse**, bridging **research → innovation → commercialization → revenue generation**, and positioning SIT among the **Top 10 Institute-led Consultancy Ecosystems in India**.

Mission

- Convert domain expertise in E&TC into **industrial consultancy, technology solutions, and IP-based services**.
- Build **multidisciplinary innovation pipelines** integrating SCWRM, SCNN, SCAAI, NGCC Club, and Electronic Design Club.
- Empower **Students + Faculty + Women Entrepreneurs** through structured, funded, industry-linked innovation pathways.
- Establish **one Center of Excellence per department**, building a **multi-department consultancy empire** at SIT.

3. Strategic Need & Rationale

India's electronic & telecom sector is growing rapidly:

- 5G/6G R&D
- Smart manufacturing
- AIoT & edge intelligence
- Defence electronics
- Semiconductor adoption
- Sustainable waste management & circular economy

However, there is a **huge gap between industry demand and institute consultancy output.**

SIT holds enormous untapped potential:

- Faculty ranked among global top scientists
- State-of-the-art research centers (SCNN, SCAAI, SCWRM)
- Active innovation culture via EPIC, NGCC, Electronic Design Club
- Strong industry networks and Symbiosis brand equity

The missing link: **a structured consultancy & commercialization engine.**

ICEC directly fulfils this need.

4. Key Stakeholders & Their Roles

4.1 Symbiosis Institute of Technology

- Provide infrastructure, faculty expertise, research talent.
- Support academic-industry collaborations, certifications, internships.
- Facilitate IP filing, technology transfer mechanisms.

4.2 Department of Electronics & Telecommunication

- Lead consultancy projects.
- Develop domain-focused ICEC laboratories & research verticals.
- Mentor student teams for industrial solutions.

4.3 Dr. Pritesh Shah – Initiative Head & CEO of ICEC @ ETC

- Provide strategic direction & research leadership.
- Oversee high-end R&D → consultancy conversion.
- Bring global credibility through world ranking & IEEE expertise.
- Drive collaborations with industries, IEEE forums, international networks.

4.4 Dr. Bhavana Ambudkar – ICEC Mentor & Innovation Officer

- Integrate EPIC Cell, Venture initiatives & innovation clubs.
- Ensure ecosystem alignment with Symbiosis innovation vision.
- Promote women-led innovation and incubation.
- Leads the translation of academic research into industry-ready solutions, ensuring that student and faculty innovations are shaped into consultancy deliverables, prototypes, and marketable technologies.
- Strengthens institutional innovation culture by integrating EPIC Cell activities with research centers, clubs, and startup initiatives, creating a seamless Ideation → Innovation → Incubation → Commercialization pipeline.
- Facilitates national and international collaborations through her extensive professional network, enabling joint projects, co-development opportunities, industrial MoUs, and consultancy tie-ups.
- Ensures continuous capacity-building for faculty and students by organizing workshops, mentorship programs, and high-impact training sessions focused on entrepreneurship, IP generation, and industry-oriented problem solving.

4.5 WIFI Foundation NPO – Industry & Venture Partner

- Provide 75% funding for Venture-related activities.
- Offer industry networks, angel investors, & consultancy clients.
- Assure **INR 10–50 Cr revenue generation in 3 years.**
- Enable **equity-based revenue sharing** for long-term sustainability.
- Mandate inclusion of at least **one woman entrepreneur per Venture.**

5. Core Objectives of ICEC

1. **Build SIT's first Consultancy Ecosystem** specialising in:
 - Electronics Design & Prototyping
 - AIoT Solutions
 - 5G/6G Communications
 - Digital Signal Processing consultancy
 - Network & Cyber-Physical Systems
 - Industrial Automation
 - Semiconductor Design & Testing
 - E-waste & Waste Resource Management (with SCWRM)
 - Nanotech Material Consultancy (with SCNN)
 - Applied AI Consultancy (with SCAAI)
2. Convert **faculty expertise & student innovations** into revenue.
3. Support **industry-funded projects, technology development, and lab-to-market solutions.**
4. Establish a **women-centric entrepreneurship model** via WIFI Foundation.
5. Generate **IP portfolios** (100+ patents in 24 months).

6. Create **interdisciplinary research clusters** with measurable outcomes.

6. Structure of the ICEC

ICEC will have the following Revenue-Generating Consultancy Opportunities and verticals:

- Smart Agriculture Sensor Networks – Consultancy for designing IoT-based soil health, irrigation automation, crop monitoring, and drone-based precision farming systems for agri-institutions and agro-industries.
- Environmental Monitoring & Compliance Solutions – Deployment of real-time air, water, noise, and waste-resource monitoring systems with analytics dashboards for industries and municipal bodies.
- Healthcare IoT & Wearable Devices – Design and validation consultancy for remote patient monitoring systems, biomedical sensors, and AI-enabled diagnostic devices for hospitals and med-tech companies.
- Industrial Automation & Predictive Maintenance – Consultancy for sensor integration, machine health diagnostics, and edge-computing systems to reduce downtime in manufacturing plants.
- Smart City & Infrastructure Solutions – Development and deployment consultancy for smart streetlighting, traffic analytics, waste-management sensors, and emergency communication systems for urban authorities.
- AIoT for Renewable Energy Optimization – Consultancy to design monitoring systems for solar, wind, and hybrid energy projects using AI-driven performance analytics.
- Telecommunication Network Optimization Services – RF planning, 5G/6G testbed setup, indoor/outdoor coverage mapping, and network troubleshooting consultancy for telecom operators and government bodies.
- Drone & UAV Technology Services – Drone-based surveying, mapping, environmental analytics, agricultural spraying mechanisms, and hardware-software co-design consultancy.

- Smart Campus / Smart Factory Design Consultancy – End-to-end implementation of automation, access control, energy management, and surveillance systems for educational institutions and industries.
- Edu-Tech Product & Platform Development – Consultancy for e-learning hardware kits, remote labs, virtual experimentation modules, AI-based assessment systems, and immersive learning solutions (AR/VR) for schools, colleges, and EdTech companies.

1. Consultancy Division

- Industry problem statements
- Customized electronics solution design
- AI/ML model deployment
- End-to-end prototyping services

2. Innovation & Prototyping Lab

- PCB Design, FPGA, RF labs
- IoT testbeds
- MATLAB & Simulink consultancy
- 5G SDR-based experimentation

3. Industrial Research Desk

- Sponsored research
- Technology validation
- Pilot-scale deployment support

4. IPR & Technology Transfer Cell

- Patent drafting support
- Licensing support
- Venture/industry IP monetization

5. Women Entrepreneurship Wing (with WIFI Foundation)

- Women-led Venture cohorts
- Pre-incubation to acceleration programs

6. Student Innovation & Clubs Integration

- NGCC Club
- Electronic Design Club
- EPIC Cell programs
- Research centers synergy

7. Training, Certification & Skill Development

- MATLAB certifications
- Industry 4.0
- AIoT skill labs
- Corporate training programs

7. Revenue Generation Model (Target: INR 10–50 Cr in 3 Years)

7.1 Sources of Revenue

- Consultancy projects from industries
- Sponsored research
- Tech development contracts
- IP licensing & royalties
- Venture equity returns
- Corporate training & certification programs
- Government scheme-funded projects

7.2 Projected Revenue Contributions

Vertical	Annual Revenue Potential	3-Year Projection
Consultancy Projects	₹3–8 Cr	₹9–24 Cr
Corporate Training	₹1–3 Cr	₹3–9 Cr
IPR & Licensing	₹1–2 Cr	₹3–6 Cr
Ventures Equity Returns	₹2–6 Cr	₹6–18 Cr
Govt./Corporate Grants	₹1–3 Cr	₹3–9 Cr
Total Projection	₹8–22 Cr/year	₹24–66 Cr

7.3 50% Equity-Based Profit Sharing with WIFI Foundation

This ensures:

- Sustainable seed money for department
- Scale-up of new ICECs across departments
- Long-term funding for SIT innovation ecosystem

8. Proposed Implementation Roadmap

Phase 1 (0–3 Months)

- Approval & MoU Signing
- Formation of Steering Committee
- Identify labs, infrastructure & faculty mentors
- Launch of 5 consultancy-ready verticals

Phase 2 (3–12 Months)

- Start consultancy operations
- Begin corporate partnerships
- Launch first 10 women-led Ventures

- Draft first 20 patents with Commercial viable scope for Tech Transfer etc
- Start certification programs

Phase 3 (Year 2)

- Expand to 15+ consultancy domains
- Secure national & international projects
- Conduct 100+ industrial trainings
- Generate minimum ₹8–12 Cr revenue

Phase 4 (Year 3)

- Achieve full-scale operations
- Revenue target: ₹20–50 Cr
- Establish next ICEC in another SIT department

9. Benefits to SIT & Stakeholders

For SIT

- Massive brand elevation
- Additional revenue for institutional development
- Industry leadership in consultancy-driven academics
- Strong national ranking impact

For Faculty

- Consultancy incentives
- International collaborations
- Patent equity based ownership & recognition

For Students

- Paid research opportunities
- Internship & job placements
- Venture acceleration & mentorship
- Entrepreneurship

For Women Entrepreneurs

- Funding & incubation
- 0-to-1 business handholding
- Market access & global exposure

10. Conclusion

The **INNOVATION Center of Excellence for Consultancy** at SIT Pune's Electronics and Telecommunication Department is not merely a project—it is a **strategic transformation model**.

With the visionary leadership of **Dr. Pritesh Shah** and **Dr. Bhavana Ambudkar**, supported by the entrepreneurial strength of **WIFI Foundation NPO**, this ICEC will convert SIT into **India's most dynamic, revenue-generating, consultancy-driven academic institution**.

This initiative will serve as a **national model** for educational institutes seeking:

- Academic excellence
- Industry relevance
- Innovation commercialization
- Societal impact
- Women-led entrepreneurship
- Revenue self-sufficiency

VISION WIFI FOUNDATION NPO:

“Transforming Research & Innovation into Revenue Generation, empowering Institutions/ Universities to contribute towards VISION Viksit Bharat 2047.”