

### Objective

MSME Idea Hackathon 5.0 aims to promote inclusive innovation by offering a platform for citizens to ideate, design, and develop solutions addressing critical national challenges. The objective is to transform high-potential ideas into scalable MSME-driven ventures that align with the pillars of Aatmanirbhar Bharat, Make in India, and Viksit Bharat @2047. This initiative will enable innovators to access mentorship, funding, incubation support, and a nationwide recognition platform.

### **Target Group**

The Hackathon is open to all individuals aged 18 to 60 years, regardless of their professional background or educational qualification. Participants may include MSMEs, students, entrepreneurs, technocrats, working professionals, academic researchers, defense veterans, and retired experts. The only prerequisite is a passion for problem-solving and a commitment to nation building. Participants shall apply on MSME Innovative portal on <u>www.innovative.msme.gov.in.</u>Last date to apply for Hackathon 5.0 is 14.07.2025

### Themes for Hackathon 5.0

# 1. Low-carbon footprint solutions/technologies

MSMEs are ideal for decentralized low-carbon footprint solutions as the energy demand is usually small and distributed, and renewable power can often be cheaper than an unreliable grid connection or diesel back-up power. Efficient integration into low-carbon pathways is usually hindered by the low technological base and typically rural, and semi-urban location of most MSME units. A major priority of innovations across the board is to protect, preserve and scale these low-carbon footprint industries.

## 2. Stealth, Surveillance, and Cyber Defense Technologies

Aligned with India's national security priorities, this theme invites innovations in stealth UAVs, low-observable materials, electronic warfare, and cyber defense frameworks. Solutions could also include AR/VR-based combat training systems and AI-enabled surveillance tools. The aim is to strengthen defense capabilities and explore dual-use civilian applications.

### 3. Innovation in Adoption of Industry 4.0 & 5.0 in MSME ecosystem

Enable MSMEs to adopt advanced technologies and leverage infrastructure created under industrial corridors and other initiatives with key focus areas -Automation and robotics, Cyber-physical systems, Human-centric innovation (Industry 5.0), Infrastructure mapping and access etc. Categories like *Plug-and-play automation kits* for MSMEs to retrofit existing machinery, *Digital twin platforms* for predictive maintenance and process optimization, *Collaborative robotics (cobots)* for small-scale assembly lines, *GIS-based tools* to help MSMEs locate and utilize nearby industrial corridor facilities like logistics hubs, testing centres, and common facility centres.

# 4. Innovation for business upliftment and sustainability in coastal and hilly areas

Promote inclusive growth by addressing the unique challenges and opportunities faced by MSMEs in geographically sensitive and underserved regions like coastal belts and hilly terrains. Participants are invited to design innovative systems that improve India's capacity to handle climate-related disruptions and emergencies. Potential areas include but not limited to AI-powered risk forecasting, decentralized supply chains, disaster-ready infrastructure, and community-based early warning systems. The emphasis is on scalable and affordable solutions that protect lives, assets, and livelihoods. Key focus areas include- climate-resilient business models, local resource-based entrepreneurship, disaster-resilient infrastructure and logistics, and digital and physical connectivity solutions etc.

### 5. Smart and Resilient Supply Chains

To strengthen MSME supply chains by making them more agile, transparent, and data driven with key focus areas like Logistics optimization, Inventory management, Supplier-buyer matchmaking and Risk mitigation and forecasting. Categories like *AI-based demand forecasting tools* for MSMEs to reduce overproduction and stockouts, *Collaborative supply chain platforms* that connect MSMEs with logistics providers and raw material suppliers, *Digital twin models* to simulate and optimize supply chain operations, *IoT-enabled smart warehousing solutions* for real-time inventory tracking, etc.