



## **GAYATRI VIDYA PARISHAD COLLEGE OF ENGINEERING** (Autonomous)

Approved by AICTE & Affiliated to Andhra University, Visakhapatnam from 2022-23  
(Affiliated to JNTUK, Kakinada upto 2021-22)

Accredited by NAAC at 'A++' Grade for 7 years in the 3<sup>rd</sup> Cycle



### **MSME Idea Hackathon 5.0**

The Ministry of Micro, Small, and Medium Enterprises (MSME) has launched **MSME Idea Hackathon 5.0** as part of the MSME Innovative Scheme. MSME Idea Hackathon 5.0 aims to promote inclusive innovation by offering a platform to ideate, design, and develop solutions addressing critical national challenges.

Ideas are being invited under MSME Idea Hackathon 5.0 from individuals aged **between 18-60 years** from all over India under MSME Innovative Scheme. MSME Idea Hackathon 5.0 is live at <https://my.msme.gov.in/inc/> & the portal will be open **till 14.07.2025**.

Interested students, faculty and innovators from outside are encouraged to take advantage of this opportunity.

For more details, please refer to the enclosed document.

**PRINCIPAL**

# MSME IDEA HACKATHON 5.0

----- Smart and Sustainable MSMEs -----

Low-Carbon Footprint Solutions/Technologies

Stealth, Surveillance, and Cyber Defense Technologies

Innovation in Adoption of Industry 4.0 & 5.0 in MSME Ecosystem

Innovation for Business Upliftment and Sustainability in Coastal and Hilly areas

Smart and Resilient Supply Chains

For ages 18 to 60 years as on 27.06.2025



## 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 [www.innovative.msme.gov.in](http://www.innovative.msme.gov.in). 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.



सूक्ष्म , लघु और मध्यम उद्यम मंत्रालय

MINISTRY OF

**MICRO, SMALL & MEDIUM ENTERPRISES**



## **MSME IDEA HACKATHON 5.0**

*Smart and Sustainable MSMEs*



**Instructions for Participation** <https://innovative.msme.gov.in>

In alignment with the Hon'ble Prime Minister's vision of a “**Viksit Bharat @2047**” and the belief that “*India's youth and innovators are the architects of a self-reliant and globally competitive nation,*” the Ministry of MSME has launched **Idea Hackathon 5.0**. This edition marks a significant milestone in the journey of fostering inclusive innovation, as it opens its doors to a broad spectrum of participants, welcoming all Indian citizens aged 18 to 60 years.

The Hackathon 5.0 is a celebration of India's diverse talent pool, which is designed to harness the collective ingenuity of our people to address pressing national challenges and unlock new opportunities for the future. With themes ranging from low-carbon technologies and cyber defense to Industry 4.0 & 5.0 adoption, coastal and hilly area sustainability, and smart supply chains, this initiative reflects our commitment to building a future-ready MSME ecosystem.

By providing access to funding, mentorship, and incubation support, the Hackathon empowers innovators to transform ideas into impactful ventures that shape the future of our nation. For implementation of the scheme the Host Institutions (HI) approved for the scheme will be supported by the Office of DC-MSME. Selected ideas will be provided funding support upto a maximum of Rs. 15 lakhs per approved idea, through the empaneled Host Institutes spread across the country.



# Process flow of Idea Evaluation

**Ministry of MSME will receive ideas from 27th June to 14th July on the dedicated Portal through the link: <https://innovative.msme.gov.in/>.**

**In the Application Form, the applicant has the option to choose the Host Institutes (HI) in their State/UT. In case there is no HI, the applicant may choose an HI of their choice from any other State/UT. Before choosing the HI, applicant may explore information about the HI regarding the viability of developing the idea and then make a decision. This will form the basis of segregating the applications regionally for evaluation and later providing incubation support. The ideas shared by the applicants will undergo two stages of rigorous evaluation at Host Institute & MoMSME level and one-stage of final selection by PMAC MoMSME.**



# Process flow of Idea Evaluation

## Stage 1 - Evaluation by the Host Institutes

- ☐ Ideas selected by the applicant will be sent to the respective HI. (HIs all across the country will shortlist meritorious ideas and will be forwarded to MoMSME). No request for change of HI by the applicant shall be entertained.
- ☐ For evaluation, each HI will identify and create a pool of experts from different domains/ areas of expertise, for e.g., entrepreneur, technical expert, financial expert, thematic expert, etc.
- ☐ From this pool of experts, a panel of minimum 3 and maximum 5 experts will be selected by the HI to evaluate each idea.
- ☐ After evaluation, each HI will submit the shortlisted applications on the <https://innovative.msme.gov.in/> and will upload the scores & details of shortlisted applicants theme-wise. During evaluation, HIs shall adhere to the guidelines/modalities decided by Ministry of MSME.

## Stage 2 - Evaluation by the Ministry of MSME

- ☐ After receiving shortlisted ideas from HI, the PMU will carry out the first stage screening. Only those ideas which have been received with relevant and appropriate information, fulfilling all the obligatory conditions as per the scheme guidelines, will be processed. If the idea uploaded is incomplete/or with incoherent information, the idea will be liable for rejection.
- ☐ This will then be counter-checked by the programme division to ensure that no eligible idea has been left out. Thereafter the screened ideas will be forwarded to the Domain Expert Selection Committees (DESCs).

# Process flow of Idea Evaluation

## **Stage 3 – Selection of Ideas by Domain Expert Selection Committee (DESC)**

The ideas received would be segregated into the following four verticals, which will be evaluated by respective DESCs.

- The thematic Domain Expert Selection Committees (DESCs) will comprise experts from Industry/Academia/Government. DESCs will select the ideas, from the ideas forwarded to them after the first stage screening.
- The DESC will evaluate the ideas as per the criteria decided by the Ministry and would select ideas for recommending to PMAC for final approval. To ensure that all the sectors and verticals get adequately represented, the number of ideas recommended shall be in the ratio of them being received. However, the cut off ratio will be indicated by the programme division.

## **Stage 4 – Final Selection by Project Monitoring & Advisory Committee(PMAC)**

- After detailed evaluation by DESCs, the recommended ideas would be forwarded to the PMAC for final approval. PMAC will be the final authority to approve the ideas.
- The approved ideas will be granted financial assistance as per scheme guidelines.
- PMAC has the right to reject any idea without assigning any reason.

# Themes for Ideas

## 5 themes to create innovation for smart and sustainable MSME ecosystem

### 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, to name a few. 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.



# Themes for Ideas

## **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.

# Mandate for Ideas

All ideas should contain, inter-alia, following basic types of Innovation Processes:

**1**

**Marketing & Branding:**

Innovation related to the customer experience

**2**

**Ideation:**

Innovation related to the product idea & concept

**3**

**Technology:**

Innovation related to the product functionality

**4**

**Co-creation:**

Innovation related to the customer involvement

**5**

**Social Innovation:**

Innovation related to the corporate culture

**6**

**Entrepreneurship:**

Innovation related to through entrepreneurial thinking

**7**

**Open Innovation:**

Innovation related to with stakeholders

**8**

**Business Model Innovation:**

Innovation related to the purpose and strategy

# Do's and Don'ts

## Do's



Ideas should have novel & innovative value, and be useful to the society



Ideas should be scalable.



Ideas should reduce cost of living, product or process.



Ideas should improve quality of life and provide convenience to living standards.



Ideas should focus on clean & green energy initiative.



In case the Incubatee is a student, then a Student Identity Card valid for FY 2025-26 must be submitted.



For proof of age, a Government issued Identity Card (preferably Aadhar) must be submitted.

## Don'ts



Do not submit any Ideas which infringes upon novelty and originality.



Do not submit Ideas which are against established scientific theories/norms.



Do not furnish information that can reveal the identity of the incubatee/MSME in the block diagram & concept note.



No incubates and mentors shall be part of any evaluation committee.

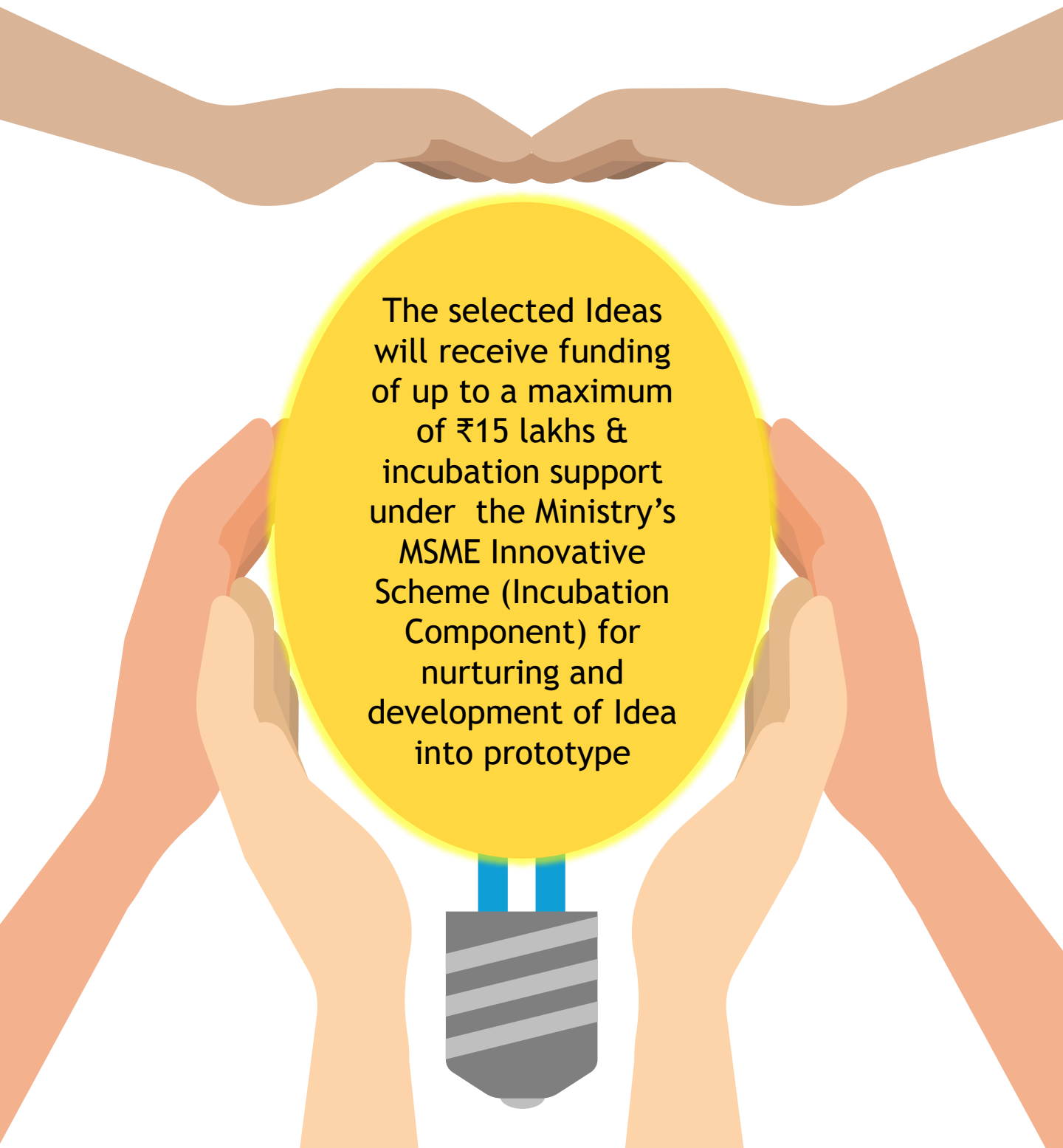


Do not include any references to research papers, newspaper articles or any individual/firm information in the Block Diagram or Concept Note.



Incubatee and Mentor should not be the same person.

# Support for Idea Development



The selected Ideas will receive funding of up to a maximum of ₹15 lakhs & incubation support under the Ministry's MSME Innovative Scheme (Incubation Component) for nurturing and development of Idea into prototype