

| HACKATHONS | STEM | AI - CODING | ROBOTICS |

"Innovation Quest: Empowering Uttarakhand's Future Education through Hackathons"

Introduction: SCERT Uttarakhand is thrilled to announce "Innovation Quest," a pioneering series of hackathons to nurture students' academic creativity, problem-solving skills, and holistic development through AI, coding, and Robotics challenges. This initiative aligns with the state's vision to foster innovation and equip students with 21st-century skills essential for success in a rapidly evolving world.

Objectives:

- To stimulate students' interest and proficiency in emerging technologies such as AI, coding, and Robotics.
- To promote collaborative problem-solving and teamwork among students and teachers.
- To provide a platform for showcasing innovative prototypes and projects developed by students and teachers.
- To facilitate experiential learning and skill enhancement through hands-on challenges and competitions.
- To foster a culture of innovation and entrepreneurship among students, nurturing future leaders and innovators.

Proposed Activities:

Hackathon Series:

- Organize a series of hackathons across various districts of Uttarakhand, catering to different age groups and skill levels.
- Each hackathon will focus on a specific theme related to AI, coding, or Robotics, providing participants with a relevant challenge to tackle.

- Hackathons will be conducted in collaboration with educational institutions, industry experts, and tech enthusiasts to ensure high-quality mentorship and guidance.
- Participants will form teams and work collaboratively to develop prototypes or projects addressing the given challenge within a specified time frame.
- Judges comprising experts from academia, industry, and the tech community will evaluate the projects based on criteria such as creativity, technical proficiency, and innovation.

Showcase Events:

- Organize showcase events following each hackathon, where participants will have the opportunity to present their prototypes or projects to a wider audience.
- Showcase events will feature interactive exhibits, live demonstrations, and presentations by students and teachers, highlighting their innovative solutions and learnings.
- These events will serve as platforms for networking, knowledge sharing, and inspiration, fostering a culture of innovation and collaboration among participants.

Training Webinars and Workshops:

- Conduct pre-hackathon training workshops to equip students and teachers with the necessary skills and knowledge required to excel in the challenges.
- Workshops will cover topics such as AI fundamentals, coding techniques, Robotics principles, project management, and presentation skills.
- Experienced trainers and industry professionals will lead the workshops, providing hands-on guidance and mentorship to participants.

- Certification and Recognition:
- Award certificates of participation and achievement to all participants, acknowledging their dedication and contribution to the hackathon series.
- Recognize outstanding projects and teams with special awards, prizes, and opportunities for further mentorship or incubation support.
- Highlight the achievements of participants through press releases, social media coverage, and SCERT Uttarakhand's official channels, inspiring others to pursue innovation and excellence.

Budget Provision:

<i>S/N</i>	<i>Item Description</i>	<i>Unit</i>	<i>day</i>	<i>Rate</i>	<i>Amount</i>	<i>Remark</i>
1	Event Platforms Online and Technical Support	1000	online	300	300000	
2	Cash Prizes and Certificates	100	online	1000	100000	
	Cash Prizes and Certificates-finalists	10	offline	5000	50000	
3	Expert Facilitators and Judges Honorarium	30	online	3000	90000	
4	Marketing and Promotion	1	online	20000	20000	
5	Training Materials	1000	online	100	100000	
6	Boarding and Lodging Jury	5	2	2000	20000	
7	Food and refreshment	15	2	600	18000	
8	Miscellaneous (stationary, local transports, etc.)	15	2	500	15000	
Total					₹ 7,13000	

Work Plan: Hackathon Program with DIETs /Schools in Uttarakhand

Preparation Phase (Month 1-2)

- Identify with all 13 DIETs of Uttarakhand to participate in the hackathon program.
- Form a steering committee comprising representatives from SCERT Uttarakhand, DIETs, and relevant stakeholders to oversee the implementation.
- Develop guidelines and criteria for selecting candidates with genuinely innovative and community-focused projects.
- Conduct orientation sessions for DIET staff to familiarize them with the hackathon program objectives, selection criteria, and evaluation process.
- Allocate necessary resources and budget for organizing block-level events.

Call for Proposals and Selection (Month 2-3)

- DIETs will announce the hackathon program and invite project proposals from teachers, students, and in-house members within their respective blocks.
- Review and evaluate the submitted proposals based on predefined criteria such as innovation, community impact, feasibility, and scalability.
- Select 10 candidates from each block whose projects demonstrate genuine innovation and potential for significant community impact.
- Notify selected candidates and provide them with guidelines for further project development and preparation for the block-level hackathon.

Level-1: Hackathons

- Organize District-level hackathons online at the designated DIET itself, providing participants with a conducive environment and necessary resources to develop their projects.
- Facilitate online or offline mentorship sessions and technical support to assist participants in refining their project ideas, developing prototypes, and preparing presentations.

- DIETs will Conduct a hackathon event where selected candidates present their projects to a panel of judges and attendees, showcasing their innovation, technical skills, and potential impact on the community.
- Judges evaluate the projects based on predefined criteria and select the top 3 projects from each block to proceed to the district-level hackathon.

Level 2: District-Level Events

Preparation Phase (Months 1)

- Compile a list of top-ranked projects from each block to participate in the district-level hackathons.
- Coordinate with district authorities and DIETs to secure venues, logistics, and other necessary arrangements for the events.
- Provide additional training and support to the selected candidates to further develop and refine their projects for the district-level competition.
- Organize district-level hackathons where the top-ranked projects from each block compete against each other.
- Candidates present their projects to a panel of judges, stakeholders, and community members, highlighting their innovation, technical prowess, and potential community impact.
- Judges evaluate the projects based on criteria such as innovation, technical proficiency, feasibility, scalability, and potential community impact.
- Select the top 3 projects from each district to proceed to the state-level hackathon.

Level 3: State Level Event

Preparation Phase (Months 2)

- Compile a comprehensive dossier showcasing the top-ranked projects from each district to participate in the state-level hackathon.
- Coordinate with SCERT Uttarakhand and other relevant authorities to organize the state-level event, ensuring adequate resources, venue arrangements, and logistical support.
- Arrange for accommodations, transportation, and other logistical support for the participating candidates and stakeholders.

State-Level Hackathon (Month 2)

- Host the state-level hackathon, bringing together the top 30 candidates from across Uttarakhand.
- Candidates present their projects to a distinguished panel of judges, policymakers, and industry experts, demonstrating their innovation, technical excellence, and potential community impact.
- Judges evaluate the projects based on stringent criteria, including innovation, technical proficiency, scalability, sustainability, and potential for community transformation.
- Select the top 10 projects deemed most innovative, impactful, and promising for future implementation.

Follow-up Actions

Recognition and Support (Month 2)

- Recognize and celebrate the achievements of the top 10 candidates through awards, certificates, and media coverage.
- Provide ongoing support, mentorship, and resources to help the winners further develop and implement their projects for the benefit of their communities.
- Document and disseminate success stories and best practices to inspire others and encourage broader adoption of innovative projects across Uttarakhand.
- Evaluation and Reflection
- Conduct a comprehensive evaluation of the hackathon program to assess its effectiveness, and identify strengths, weaknesses, and areas for improvement.
- Solicit feedback from participants, stakeholders, and beneficiaries to inform future iterations of the program.
- Reflect on lessons learned and best practices to refine the program's design and implementation for greater impact and sustainability in the future.

संभावित राज्य स्तरीय हैकार्थॉन सीरीज: मई -नवंबर 2024

प्रथम चरण

- बेबीनार: डाइट और मुख्यशिक्षाधिकारी के साथ बैठक
- जनपदवार एक्सपर्ट एवं मेन्टर शिक्षकों का चयन
- विद्यालयों का चयन
- छात्रों का चयन प्रति जनपद कक्षा 6-10 (कम से कम एक प्रतिकक्षा और अधिकतम 10 छात्र/छात्रा)
- ट्रेनिंग और मेंटोरिंग शिक्षक एवं छात्र/छात्रा
- ऑनलाइन प्रशिक्षण सामग्री विकास एवं प्रेषण
- सामग्री की प्रस्तुति और विशेषज्ञ मार्गदर्शन

द्वितीय चरण:

- प्रथम हैकार्थॉन सीरीज प्लेटफॉर्म:
- निर्माण और लॉन्च
- ऑनलाइन प्रोजेक्ट कार्य प्रेषण
- मूल्यांकन: प्रथम 1000 डाइट स्तर पर
- ऑनलाइन प्रेजेंटेशन के माध्यम से

तृतीय चरण:

- हैकार्थॉन सीरीज प्लेटफॉर्म (टॉप 100): निर्माण और लॉन्च
- ऑनलाइन प्रोजेक्ट कार्य प्रेषण
- मूल्यांकन: प्रथम 1000 डाइट स्तर पर
- ऑनलाइन प्रेजेंटेशन के माध्यम से

सम्मान समारोह:

- राज्य स्तर सम्मान समारोह (प्रमाण पत्र / कैश प्राइज)

- समीक्षा और समापन समारोह

निर्णायक एवं मेन्टर एक्स्पर्ट्स:

तकनीकी संस्थान के प्राध्यापक/ उच्च शिक्षा के विशेषज्ञ / राष्ट्रीय पुरस्कार प्राप्त शिक्षक / अन्य कुशल एक्स्पर्ट्स

मूल्यांकन प्रपत्र -

SCERT- आई टी विभाग - मानकों के आधार पर Rubrics निर्मित करेगा।