

OFFICIAL EVENT CATALOGUE

HIMALAYAN STEM QUEST 2026

Inaugural STEM Ecosystem & Tech Challenge
for Northern India.

THEME

Defence & Security Challenge

VENUE

DAV Public School, New Shimla

EVENT DATE

3 October 2026

ELIGIBILITY

Classes VI - XII

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Competition layouts, equipment, schedules, judging procedures and event arrangements may change before the event.
Participants should always refer to the latest official communication released by Himalayan STEM Quest.

Welcome to the Quest

Welcome to the inaugural **Himalayan STEM Quest (HSQ) 2026**! We are gathering at the beautiful campus of **DAV Public School, New Shimla**, to explore one of the most critical sectors of modern engineering: **Defence & Security**.

Himalayan STEM Quest is more than just a robotics competition; it is a platform for the young minds of the Himalayan region to showcase their creativity, test their designs under pressure, and learn from their peers. Whether building autonomous ground vehicles, flying micro drones, modeling CAD structural designs, or training local computer vision models, participants engage directly in the work of future technology leaders.

About Himalayan STEM Quest

The Himalayan STEM Quest is an annual regional STEM ecosystem established to inspire youth in mountain communities to explore hands-on technology, robotics, and engineering. By bringing standardized challenges, hardware kits, and calibration systems to the region, HSQ builds the foundation for tomorrow's engineers.

ORGANIZERS & PARTNERS

Himalayan Robotics Pvt. Ltd.

Vignan Learning Solutions

HSQ 2026 Core Event Philosophy

Collaboration

Sharing tools, calibration logs, and advice in active pit areas.

Iteration

Viewing troubleshooting and failure as dynamic learning blocks.

Safety First

Enforcing safety buffers, protective gear, and battery rules.

Competitive Tracks

Six official categories designed to test mechanical prototyping, coding logic, and structural engineering.

HSQ-R01

Operation REDWIRE

Remote-controlled robotic manipulator rover challenge. Teams guide vehicles around columns to isolate and sever a target RED wire safely under timed parameters.

Classes: IX-XII

Team: 1-2 Students

HSQ-D01

SkyStrike

Micro quadcopter drone obstacle navigation. Pilots fly through post-gates to execute precision relief payload pickup and drops.

Classes: VI-XII

Team: 1-2 Students

HSQ-3D01

ForgeLab

On-site CAD modeling challenge. Designers analyze an engineering structural crisis and model parametric solutions in standard software.

Classes: VI-XII

Team: 1-2 Students

HSQ-AI01

Sentinel Vision

Offline local Python computer vision challenge. Teams build machine learning algorithms to detect and classify target objects from physical camera feeds.

Classes: IX-XII

Team: 1-2 Students

HSQ-IN01

Vanguard Expo

Open exhibition showcase for original hardware/software safety solutions. Focuses on avalanche, landslide, or alpine security prototypes.

Classes: VI-XII

Team: 1-2 Students

HSQ-AIR01

ShadowTrack

Autonomous human-following mobile robot challenge. Student-built wheeled rovers lock onto and track a designated target person smoothly.

Classes: VI-X

Team: 1-2 Students

Registration & Event Day

Registration Process

All nominations must be submitted through the official online school coordinator portal. Spot registrations are not allowed.

- ****Nomination****: School coordinators create accounts and nominate students.
- ****Documents Required****: Parental consent (NOC) and Student ID proof.
- ****Fee****: ₹1000 per participant (includes event kit, refreshments, credentials).
- ****Closing Date****: September 15, 2026.

High-Level Event Schedule

07:30 - 08:30	Check-in & Technical Inspection
08:30 - 09:30	Welcome & Arena Briefing
09:30 - 13:00	Qualification & Expo Judging
13:00 - 14:00	Lunch & Peer Collaboration Hour
14:00 - 16:00	Bracket Finals & Live Demos
16:00 - 17:00	Awards & Closing Ceremony

Contact Support

Email: coordinator@himalayanstemquest.org
Website: himalayanstemquest.org

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