

INNOVATION CENTER

The Center connects student agency, teacher expertise and institutional learning across K–12.



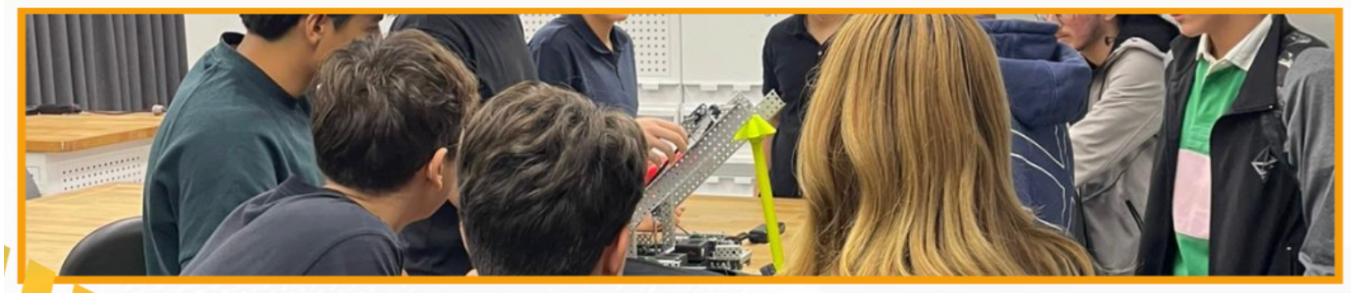
HISAR SCHOOL

A living ecosystem that brings students, educators and external partners into the same culture of inquiry, design and action.

INSTITUTIONAL PROFILE

Hisar School Innovation Center is more than a place where projects happen. It is a schoolwide development platform: a space for asking better questions, designing meaningful learning, building prototypes, forming partnerships and turning promising ideas into sustained capacity.

Its portfolio brings together STEAM, sustainability, entrepreneurship, research and development, social innovation, and disaster resilience. The common purpose is clear: to help young people learn by making, to help educators learn with one another, and to help the school remain responsive to a rapidly changing world.



More than a project office: a platform for institutional learning

The Hisar School Innovation Center connects student agency, teacher expertise and institutional development in one coherent platform. Its work spans sustainability, applied engineering, enterprise, research and disaster resilience, but the value of the Center lies beyond any single project. It helps the school test new ideas, build capacity, open learning to the world beyond campus and turn future-facing priorities into practices that can be experienced, examined and improved.

01

Extends learning

Creates experiences beyond the boundaries of lessons, clubs and competitions, making inquiry, prototyping, research and real-world problem solving part of the learning culture.

02

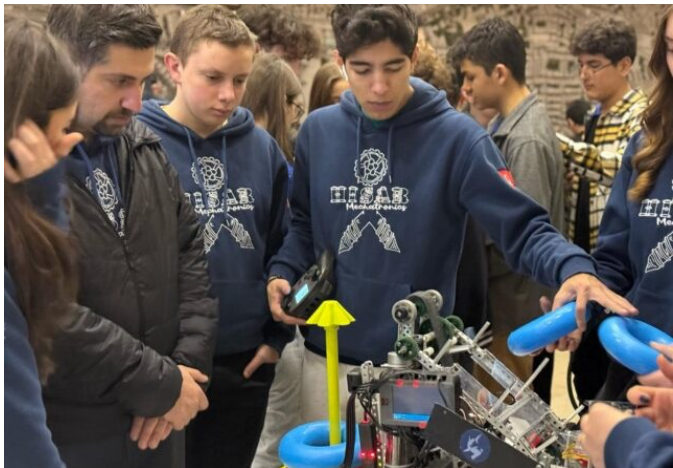
Builds institutional capacity

Develops programmes, professional learning, research and reporting that strengthen the school's ability to respond to emerging educational needs with purpose and evidence.

03

Connects school with the world

Turns relationships with universities, schools, industry, civil society and expert networks into high-quality learning opportunities for students and educators.



Here, “innovation” is not an event category. It is a way for a school to think, learn and improve.

The Center brings application, education, research, development and social impact into one connected cycle of learning.



Students are not simply the audience for innovation. They are its researchers, designers, builders, organisers and ambassadors.

A community built to think and build together

The Center is deliberately structured around three complementary voices. Educational judgement, student agency and professional expertise meet in the same space for planning, making and reflection.

Teacher Committee

K-12 educators contribute to project development, programme design, events, learning materials, policy work and dissemination, giving the Center its day-to-day educational reach.

Student Committee

Students are active partners who identify needs, frame questions, develop projects and shape the Center's sustainability and social innovation agenda through sustained participation.

Technology & Innovation Advisory Board

Parents with national and international experience in technology and innovation contribute strategic perspective, specialist knowledge, current-sector insight and network-building capacity.



The result is a governance model that turns school-family-community interaction into a working mechanism: educators bring pedagogical judgement, students bring curiosity and agency, and the Advisory Board brings an outward-facing perspective.



Five fields. One shared purpose.

The Center treats its fields as connected entry points rather than separate programmes. Across them, students learn to make sense of complexity, work with evidence, design responses, test ideas and connect what they create with real-world value.

Sustainability Whole-school sustainability, education for sustainable development, student agency and social impact.	STEAM Applied learning that connects science and engineering with design, technology, the arts and mathematics.	Enterprise & Innovation Moving from ideas to value propositions through feasibility, impact, communication and venture thinking.
Research & Development Generating new knowledge and solutions through data, prototypes, technical inquiry, programme development and institutional reporting.	Earthquake & Disaster Studies Building scientific literacy, risk awareness, preparedness, resilience and school-based decision-making capacity.	SHARED GROUND The Student Committee and Hisar Engineering Society are the two principal student platforms through which these fields become sustained practice rather than one-off activity.



Hisar Engineering Society: engineering as a lived practice

Developed through collaboration between the Innovation Center and the Middle and High School Science Departments, Hisar Engineering Society enables students to experience engineering as a full cycle of design, building, testing, improvement and representation. Technical work sits alongside enterprise, communication and social contribution, creating a richer picture of what engineering practice can be.

HES Racing

15 students

Electric vehicles, telemetry and sustainable mobility

HES Mechatronics

25 students

VEX V5, electro-mechanical systems and coding

HES Energy

8 students

Hydrogen fuel cells and clean-energy systems

HES Junior

12 students

VEX IQ and engineering design at middle-school level

HES Teams+

35 students

Real-world engineering challenges and interdisciplinary competition

HES Business

25 students

Enterprise, brand, communication and event operations



Learning that produces evidence, systems and results

Competition is treated as an authentic test environment rather than an end point. Research projects extend the same cycle by asking students not only to make a system work, but to understand its behaviour through data and improve it with evidence.



Electric Vehicle Grand Prix - Dubai

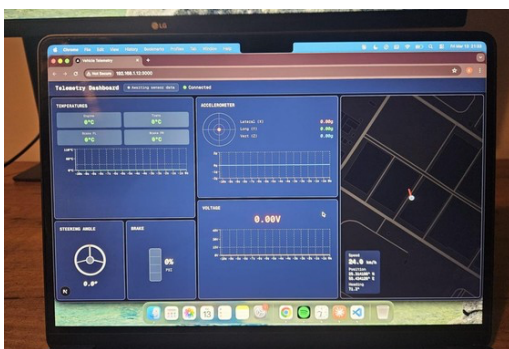
9 students • 42 teams

HES Racing built its own electric vehicle over three intensive days and finished 1st among first-year teams, 6th in the Stock Car category and 10th in the mixed category. The preparation process also received the Projotech Award.

VEX V5 & European Open

41 teams • 600+ participants

The European Open hosted on the Hisar campus brought together teams from Türkiye, Germany, Romania and Kazakhstan. Students were not only competitors: they also took responsibility for the planning, communication and operations of a large international event.



Research line: telemetry and advanced systems

The electric-vehicle telemetry project turns energy use, power distribution and driving data into an integrated evidence system. Work on active liquid cooling takes students further into thermodynamics and heat transfer, connecting theoretical models with the performance of electro-mechanical systems.

HYDROGEN HES Energy | **ROBOTICS** HES Mechatronics / Junior | **ENGINEERING CHALLENGES** HES Teams+

Sustainability as a whole-school practice

Sustainability is treated as a way of designing school life rather than a stand-alone environmental topic. Curriculum, student participation, professional learning, institutional decision-making and social impact are deliberately connected so that learning can translate into practice.

441

PARTICIPANTS

49 institutions • 20 cities

Sustainability for Education Summit

441 participants • 49 institutions • 20 cities

Co-developed with Robert College, the Summit brought educators, school leaders, academics, civil-society actors and students into a shared learning space. One of its most tangible outcomes was the Sustainable Schools Commitment developed through the student workshop.



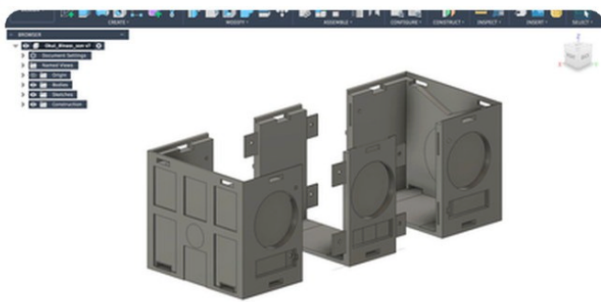
Student agency with continuity

The Student Committee combines weekly project work with an enriched Coursera learning programme and initiatives such as Purpose Pen and Storain, giving students sustained space to move from understanding issues to shaping responses.



A whole-school learning architecture

Curriculum alignment, age-appropriate adaptation of sustainability learning outcomes, professional learning for educators and institutional sustainability reporting show how the Center's contribution extends beyond student projects into school-wide capacity.



STORAIN

Rainwater collection and filtration become an applied STEAM experience and a tool for early environmental learning.



FROM WASTE TO ART

Plastic waste is reframed as a resource for creative production, circular thinking and environmental responsibility.

Enterprise with purpose

Enterprise education is not reduced to pitching or competition. Students learn to frame a real problem, shape a value proposition, test feasibility, communicate with stakeholders and consider the social consequences of what they create.

AI for Good

AI → SOCIAL IMPACT

AI for Good

Developed with QNB and Microsoft Türkiye, AI for Good connects artificial intelligence, sustainability and enterprise within a shared problem-solving frame. Technology is approached as a means to create social and environmental value.



HES Business

From Diamond Challenge and AwardX to brand development, social media and European Open operations, students experience enterprise alongside communication, representation and event management.



Koruncuk Robotics

Four high-school students provide ongoing robotics mentoring to a group of ten girls at KORUNCUK Vakfı Bolluca Köyü, combining technical knowledge with peer leadership and social contribution.

Student initiatives such as Purpose Pen and Kibele Pazar extend the same mindset: understand people and context, make a problem visible, and develop a response that can create meaningful value.



FİKİR KAŞIFLERİ

Stories, games and workshops help younger learners explore the SDGs through empathy, imagination and problem solving.



KİBELE PAZAR

A digital social enterprise concept makes women producers and cooperatives more visible and accessible.

Turning a local, life-critical issue into scientific learning

In Istanbul, earthquake and disaster studies are an essential part of any serious future-facing agenda. The Center therefore moves beyond awareness campaigns and works with risk, evidence, preparedness, resilience and decision-making as connected areas of scientific and educational practice.

Earthquake & disaster studies

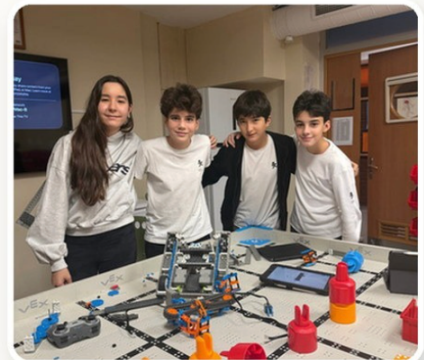
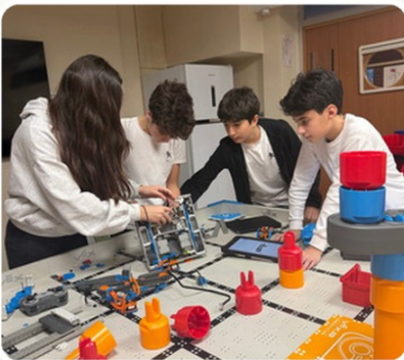
- Middle School Disaster and Earthquake Research Club: students examine school safety through research, risk analysis and plan development.
- Earthquake Physics Erasmus+ partnership process: building international links and new learning opportunities through shared practice.
- Earthquake Science Teacher Education: programme development that brings the scientific expertise of Prof. Mustafa Erdik, Dr. Cüneyt Tüzün and Dr. Süleyman Tunç into a school-ready learning framework.

R&D and institutional learning

- NuVu and NEIA benchmarking: comparative learning about how innovation can be designed through time, space, pedagogy and school culture.
- Sustainability reporting: institutional research that makes school-wide evidence visible, identifies patterns and strengthens the next planning cycle.
- Technical R&D: telemetry, active cooling, hydrogen and student research projects that connect theoretical models with system design and data.



The Center's R&D mindset is as much about asking "How do we know, test and improve?" as it is about making something new.



Extending the learning environment beyond campus

For the Center, partnership is not a row of logos. It is a way to create a learning experience Hisar could not produce alone by bringing the right expertise, context and shared purpose into the work.

University & engineering UCL Mechanical Engineering · UCL Formula Student Racing Team Advanced engineering learning, early exposure to university culture and summer-school development.	Schools & education networks Robert College · TED Eskişehir Koleji · Erasmus+ partnerships Co-designed programmes, professional learning in sustainability, consultancy and international exchange.
Technology & business Microsoft Türkiye · QNB · Technology & Innovation Advisory Board Artificial intelligence, enterprise, current-sector perspective, mentoring and network building.	Civil society & comparative learning KORUNCUK Vakfı · NuVu · NEIA Social impact, peer mentoring and institutional learning through innovative school models.

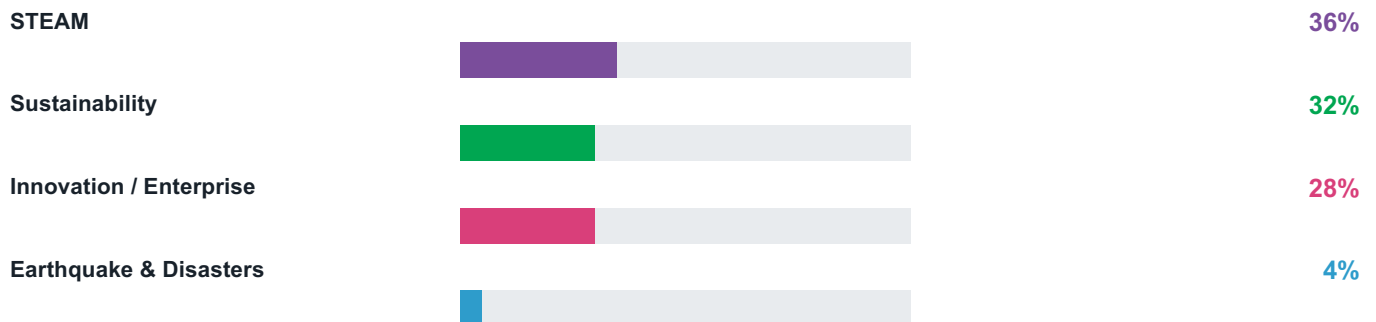
The network works in both directions: Hisar learns from external expertise and also shares its own developing practice, as seen in sustainability education and consultancy with other schools.



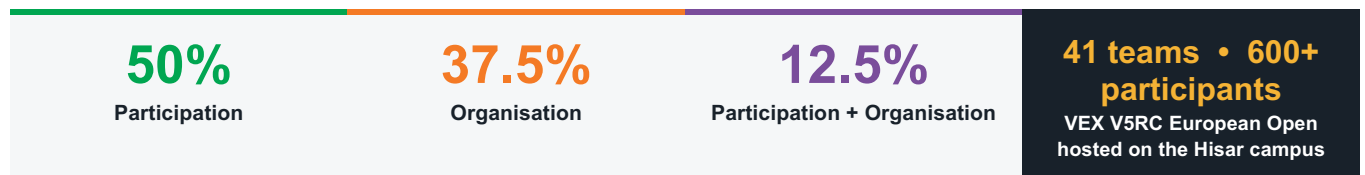
A balanced portfolio with strong delivery capacity

The 2025-2026 activity data shows a Center that is not dominated by a single theme or mode of work. Technical production is balanced by sustainability and enterprise, while a strong emphasis on application and education is supported by research, development and social impact.

THEMATIC MIX



PROCESS & FUNCTION



ACTIVE STUDENT STRUCTURES



Team figures represent active participation across projects and working groups rather than unique students; the same student may contribute to more than one structure.

The future is not a single flagship project. It is a connected system in which ideas can move, mature and create lasting value.



Innovation is how a school learns its way forward.

The Hisar School Innovation Center is designed to turn curiosity into inquiry, inquiry into making, and making into meaningful value for students and the school. Its strength is not a collection of isolated successes, but the continuity created by committed teams, purposeful partnerships, evidence-informed development and an innovation culture that can travel across the institution.

QUESTION

DESIGN

MAKE

IMPROVE

SHARE

[Innovation Center website](#) • [Innovation Center film](#)

Source basis: Hisar School Innovation Center 2025-2026 Activity Report, the official Hisar School website, and internal project and evaluation documents.