

Introduction to the International Space Science and Scientific Payload Competition (ISSSP2025)

Background

Exploring the universe has been humanity's enduring dream. From ancient astronomers to modern planetary probes, we have steadily unveiled the cosmos through missions to the Moon, Mars, Venus, asteroids, and beyond. With the completion of the China Space Station in 2022, we now possess an unparalleled orbital laboratory—an ideal platform for multidisciplinary, long-term space science research and payload technology development. Since its launch, ISSSP has engaged over 2,000 competitors from more than 80 universities across 30 countries and regions, fostering global collaboration and driving advances in space science and engineering. In 2025, under the theme “The Stars and the Sea of the Cosmos: A Journey of Ten Thousand Miles,” we embark on the next leg of our voyage.

Vision

- **Leverage Unique Space Resources** to conduct frontier research aboard the China Space Station.
- **Catalyze Breakthroughs** in both fundamental science and

next-generation payload technologies.

- **Accelerate Civilian Applications** by transitioning aerospace innovations into industrial and societal use.
- **Foster Global Collaboration** through a culture of co-creation, shared results, and joint stewardship across borders.

Mission

- **Unite Global Talent** by attracting and mentoring outstanding students and projects in space science and payload engineering.
- **Ignite Innovation** via competitive challenges that inspire novel scientific ideas and advanced instrument designs.
- **Expand Public Outreach** with expert lectures, popular science programs, and media engagement to elevate aerospace literacy.
- **Bridge Academia, Industry & Capital** by creating channels for research institutions, enterprises, and investors to collaborate and commercialize breakthroughs.

Highlights

- **Innovative Format & End-to-End Support**

Cross-disciplinary teams progress through a fully managed process—topic guidance, expert webinars, Q&A sessions, and online community forums—culminating in high-stakes finals.

- **STEAM-Driven Talent Cultivation**

Integrates Science, Technology, Engineering, Arts, and Mathematics via interdisciplinary workshops and technical tutorials.

- **Belt & Road-Centered Brand**

Partners with universities along the Belt & Road and leading global aerospace institutions to foster inclusive, mutually beneficial exchange.

- **Post-Competition Empowerment**

Expert juries—including CNSA specialists and IAA academicians—select winning projects for targeted incubation, funding introductions, and potential flight tests.

ISSSP Organization Committee

Guidance unit

Chinese National Space Administration(CNSA)

Co-Hosts

Chinese Society of Astronautics

Beijing Institute of Technology

China Space Foundation

International Academy of Astronautics

Asia-Pacific Space Cooperation Organization

International Aerospace Science and Technology Innovation Organization

Association for Promotion of Science and Technology of Macau

Organizers

Beijing Ligong Genshu Technology Co.,Ltd

To ensure the professionalism and cutting-edge nature of the competition, the list of the organizing committee will be supplemented with experts, leaders, and partners from government, universities, research institutes, and businesses during the preparation process of the event.

The organizing committee for the competition, known as the "International Space Science and Payload Competition Organizing Committee" ("Organizing Committee"), is jointly formed by the sponsors, guiding units and organizers, and co-organizers. The Organizing Committee is led by the Executive Committee and is responsible for the overall organization of the competition. The Expert Advisory Team, consisting of experts in the field of aerospace, provides comprehensive technical support and guidance.

Under the Executive Committee, there are subcommittees, including the Competition Review Committee, Competition Operations Committee, and the Competition Secretariat, responsible for the evaluation, operations, and communication and coordination of the competition, respectively.

Before the competition, the Executive Committee, Operations

Committee, and Review Committee work together to determine the competition process, plans, and detailed rules. During the competition, they oversee the overall competition, participate in the preliminary and final evaluations, and manage ongoing operations. After the competition, the Review Committee, Executive Committee, and Operations Committee are responsible for reviewing awards, presenting awards, and summarizing the competition activities.

If participating teams have objections to the evaluation results, they can submit a written inquiry application to the Organizing Committee Secretariat (secretary@isssp.org.cn) on behalf of their respective institutions and teams, authorized by the relevant student administrative department of their institution. The application should outline the appeal issues, reasons, and provide necessary supporting materials. The Review Committee will conduct a reevaluation, and the Executive Committee will make the final decision. In case of a tie in the final scores of participating projects that affects the determination of the number of projects advancing to the next round, the Review Committee will conduct a vote until a final result is reached. In the event of unforeseen circumstances requiring adjustments to the competition format, the Executive Committee will make the final decision, and the Operations Committee will notify all participating teams.

Key Information

- Slogan

A Shared Space for a Better Future

- Format

Online Global Preliminary + Hong Kong Final

- Schedule

Events	Date
Register	24 Apr, 2025
Preliminary Submission Deadline	30 Jun, 2025
Qualify for the Final	15 Aug, 2025
Community Building	Sep-Oct, 2025
Shortlisted Team Training	
Deadline for Submission of Final Work	31 Oct, 2025
Final Contest (Hong Kong)	27-29 Nov, 2025

- Participants

[Middle School Students Group\(Invitation\)](#), [University Students Group](#)

Middle School Students Group: Mainland China Observation Team (Invitation) and Hong Kong/Macao middle School Students Team up to Participate, The Middle School Students Group will participate in Track 1, Creative Design of Space Experiment.

University Student Group: Open to global university students, including undergraduate, graduate, and doctoral students. The University Student

Group can choose to participate in Track 1, Creative Design of Space Experiment or Track 2, Innovative Design of Space Payload Experiment.

Social Organization Group: Open to social institutions or other groups.

- Tracks

Track 1: Creative Design of a Space Experiment

According to the environmental needs of the Space Station, The participating teams establish the objectives without referring to Technical Requirements illustrated in Appendix 5, then identify the corresponding scientific experiment requirements and formulate the design plan based on the environmental status of the space station.

Track 2: Innovative Design of a Space Payload Experiment

According to the environmental needs of the Space Station and the technical requirements, the teams shall propose an innovative space payload design and build the principle prototype of the payload instrument or conduct simulation of the equipment. The Technical Requirements should be taken as the reference.

- Awards & Supports

The number of awards for this competition is not fixed. In the finals, teams will be awarded based on their total scores as follows:

 **Gold Award (≥90 points): CNY 150,000**

 **Silver Award (80-89 points): CNY 50,000**

 **Bronze Award (<80 points): CNY 10,000**

Track 2 Finalist Bonus: CNY 5,000 per team

Special Awards: Best Community, Poster, Hardware/Simulation,
Presentation & Instructor

Further Support: Flight-test candidacy on CSS, ISS, lunar bases, and deep-space missions; priority in talent programs; introductions to investors; and access to academic resources.

Contact

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