



# Huawei ICT Competition 2024-2025 Europe

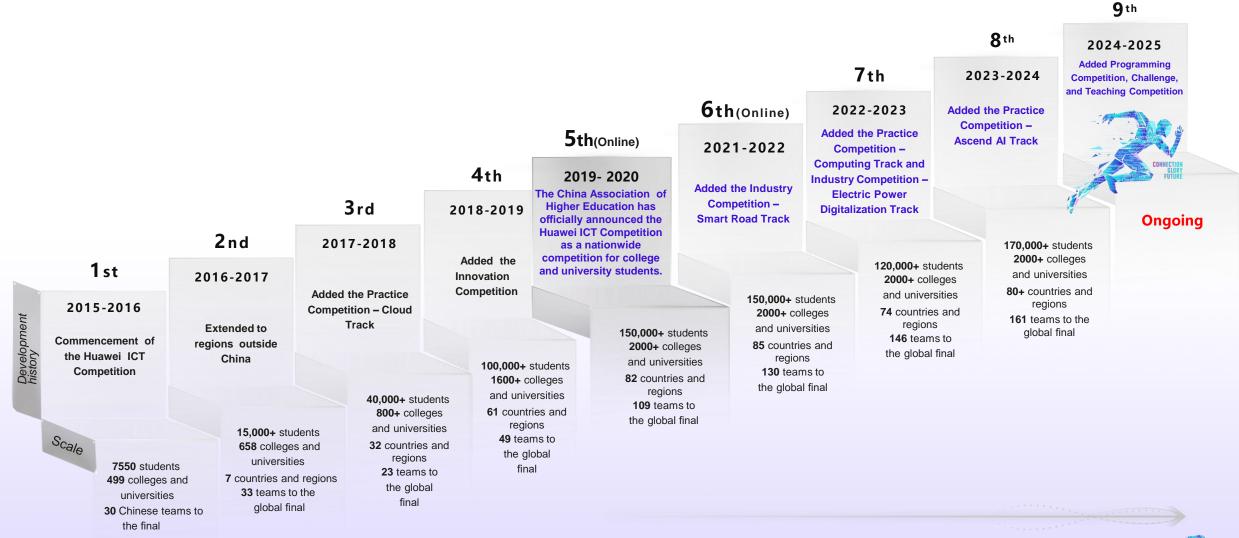




#### 1. ICT Competition

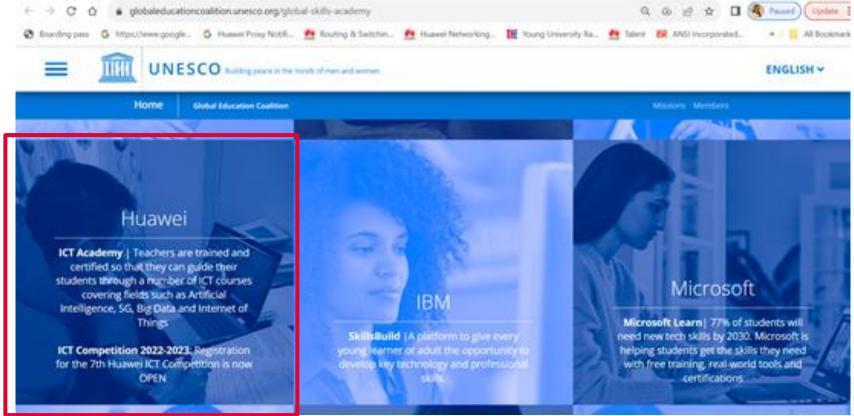
- History
- UNESCO
- ICT Competition 2023-2024 Achievements
- 2. Huawei ICT Competition 2024 2025
  - Practice Competition
  - Innovation Competition

# Huawei ICT Competition: An International Talent Platform



# Huawei ICT Competition: A Key Partner Flagship Program Recognized by UNESCO's Global Skills Academy

- In March 2020, UNESCO established the Global Education Coalition to meet the education requirements of students and ensure learning continuity during the global pandemic. Huawei is a proud partner of the Coalition.
- In July 2020, the Huawei ICT Competition was recognized as a key partner flagship program by the UNESCO's Global Skills Academy to help learners develop their ICT skills.





#### **Huawei ICT Competition 2023-2024 Europe**





Poland Grand Prize Winning Team - Network Track

Türkiye Grand Prize Winning Team - Innovation Track



Closing & Awarding Ceremony of the 8th Huawei ICT Competition 2023-2024 Global Finals

#### Winning teams of Network Track

- Grand Prize Poland: Poznań University of Technology
- Second Prize Italy: Università Politecnica delle Marche
- · Third Prize Spain: University of Alicante

#### Winning teams of Computing Track

 Third Prize – Türkiye: Erzurum Technical University&TED University

#### Winning teams of Cloud Track

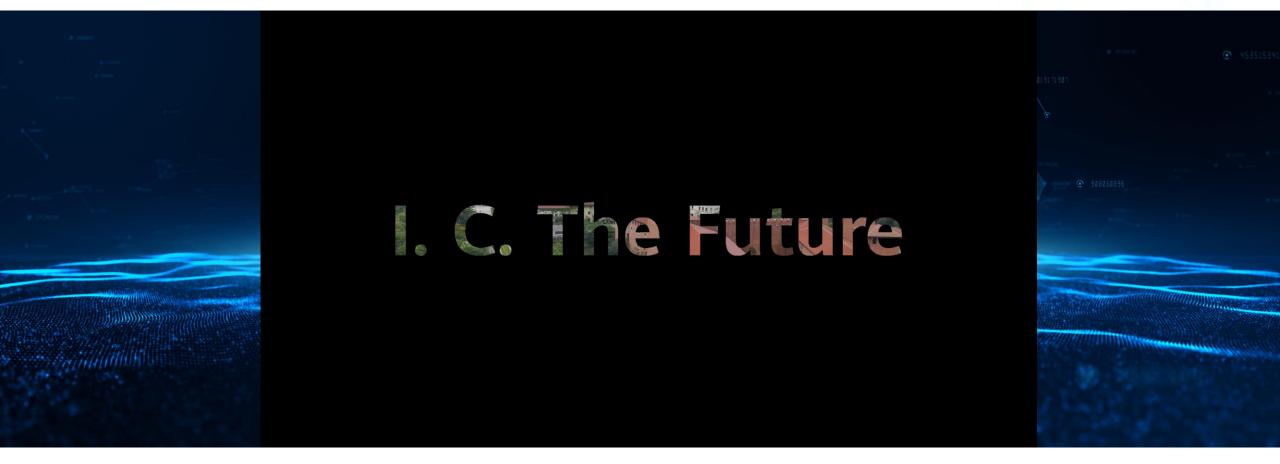
- · Second Prize Italy: K Labs Academy
- Second Prize Poland: Poznań University of Technology
- Third Prize Türkiye: Eskişehir Osmangazi University&Yalova University

#### Winning teams of Innovation Competition

- Grand Prize Türkiye: MEF University, Team: Edusyntech
- · Second Prize Greece: University of Macedonia, Team: InnovHub



# Huawei ICT Competition 2023–2024 Global Final highlight video



# **Huawei ICT Competition guest messages**



Stefania Giannini Assistant Director-General for Education, UNESCO

UNESCO works to uphold the basic rights and agency of every learner and teacher when using digital technology and AI, and promotes an inclusive, equitable, open, and secure digital future for all. Many thanks to our partners like Huawei for their longstanding support.



Prof. Dr. Prof. h.c.
Otthein Herzog
International Member of the Chinese
Academy of Engineering

For most people working in ICT today and tomorrow, the emphasis of ICT applications has switched from algorithm development to the collection and representation of multi-modal application knowledge, be it by text documents, images, drawings, videos, or even 3D rendings. I foresee some years of fascinating development of LLMs, which certainly will capture the imagination of many scientists, thus improving tools that are already very powerful today.



Borhene Chakroun Director for Policies and Lifelong Learning Systems, UNESCO

Huawei ICT Competition is a testament to the result achieved and the incredible potential of our partnership. Our co-launching the dedicated Global Skills Academy & Huawei ICT Academy eLearning platform, which offers free certifiable training on digital technology, 5G, Al, Big Data and more in five different languages in supporting UNESCO's Global Skills Academy mission. Let me thank our colleagues at Huawei for their long-standing support.



Ge Siying
Deputy Director-General, Chinese National
Commission for UNESCO

The National Commission of China for UNESCO supports Huawei's engagement in the global digital transformation of education with its unique strengths, and will continue working with global partners to make greater contributions to the promotion of digitalization in education worldwide and the achievement of prosperity for all.

# **Huawei ICT Competition guest messages**



Zhou Hong President of the Institute of Strategic Research, Huawei

To make sure everyone can truly enjoy the benefits of digitalization while such technologies are making radical progress, Huawei believes it is crucial to guarantee that digital technologies are accessible to all.



David Wang President of Corporate Communications Dept, Huawei

It will take decades to build a 'fully connected intelligent world'. The world will belong to future generations and will be built by their talent. So, Huawei has a long-term commitment to empowering young communities and sharing digital knowledge.



Ritchie Peng President of the ICT Strategy & Business Development Dept, Huawei

ICT is the cornerstone of the intelligent world. Through the Huawei ICT Competition, we aim to provide students with a global platform to compete and exchange ideas.



Vicky Zhang
Vice President of Corporate
Communications
Dept, Huawei

Women are under-represented in the ICT industry. However, we are delighted to see that more and more teams consisting of only women have participated in the Huawei ICT Competition in recent years. We hope that women winners from the competition can encourage more women to join the ICT sector, and help them benefit from the digital world.



#### 1. ICT Competition

- History
- UNESCO
- ICT Competition 2023-2024 Achievements

### 2. Huawei ICT Competition 2024 - 2025

- Practice Competition
- Innovation Competition





#### Huawei ICT Competition 2024-2025 Europe





#### **Track Planning**

#### **Practice Competition**

#### **Network Track**

(Datacom, security, WLAN, and DCN)

#### **Computing Track**

(openEuler, openGauss, and Kunpeng)

#### **Cloud Track**

(Cloud, Big Data, and AI)

#### **Innovation Competition**

#### **Al Innovation Track**

(Al general, Ascend, CANN, MindSpore, cloud native, and OpenHarmony)

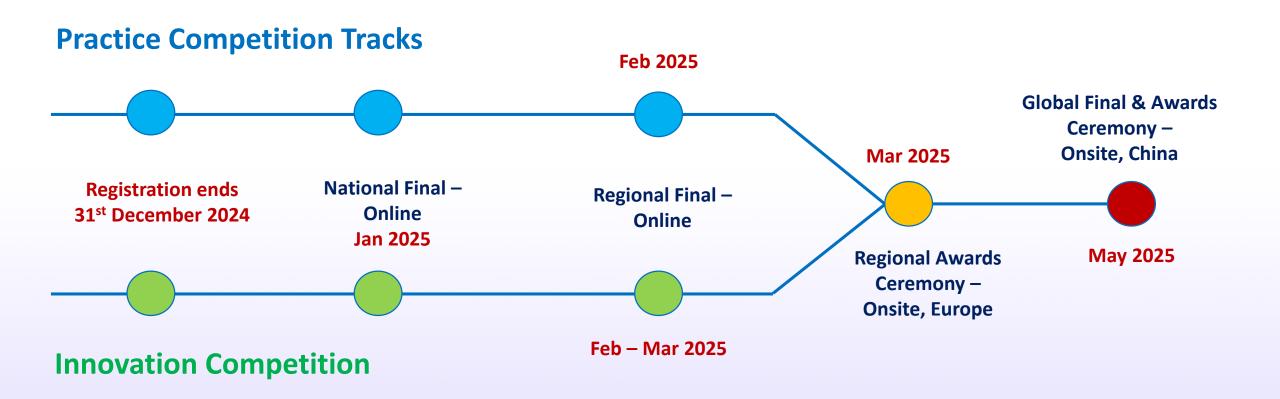
#### **Teaching Competition**

**Experimental Teaching Case Track** 

**ICT Academy Operation Case Track** 

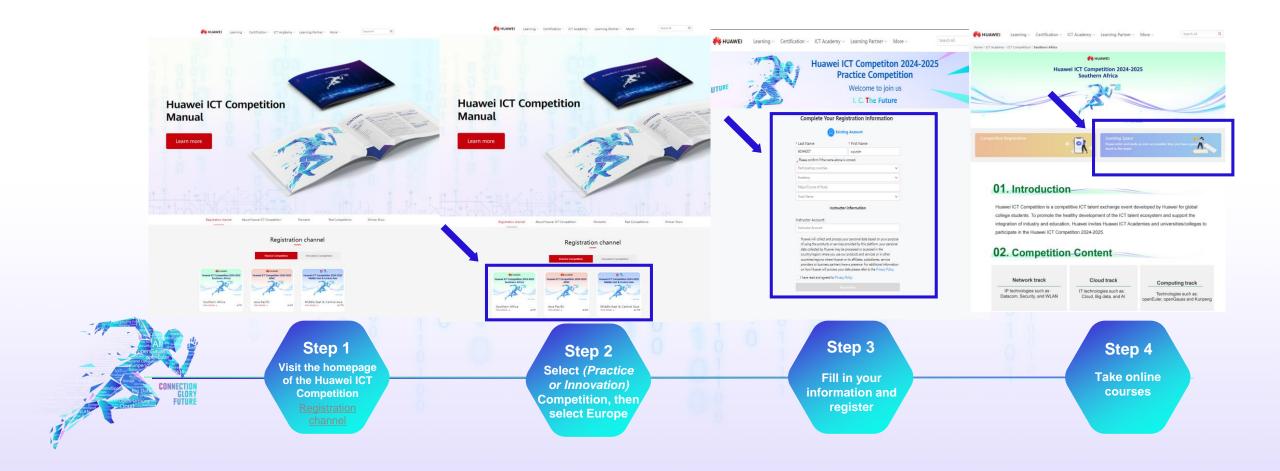
# Student Competition Timelines







# Huawei Talent – Official registration platform for the Huawei ICT Competition 2024–2025

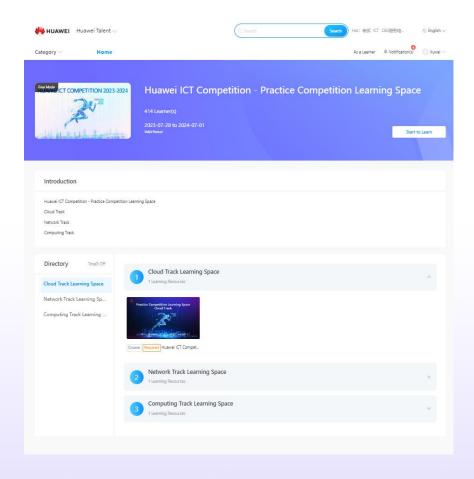






In addition to participating in related courses under the Learning module of the registration page, you can also strengthen your knowledge through iLearning.

iLearning (Shixizhi)





#### Huawei ICT Competition 2024-2025 Europe



I. C. The Future

Competition Registration



#### **Learning Space**

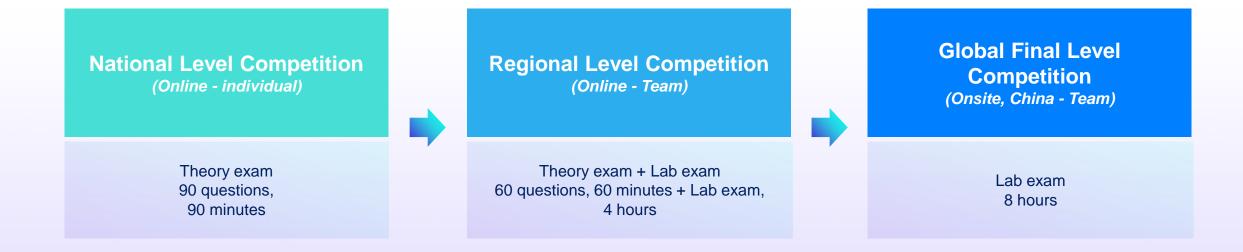
Please enter and study as soon as possible. May you have a government in the exam!

# 01. Introduction - Practice Competition

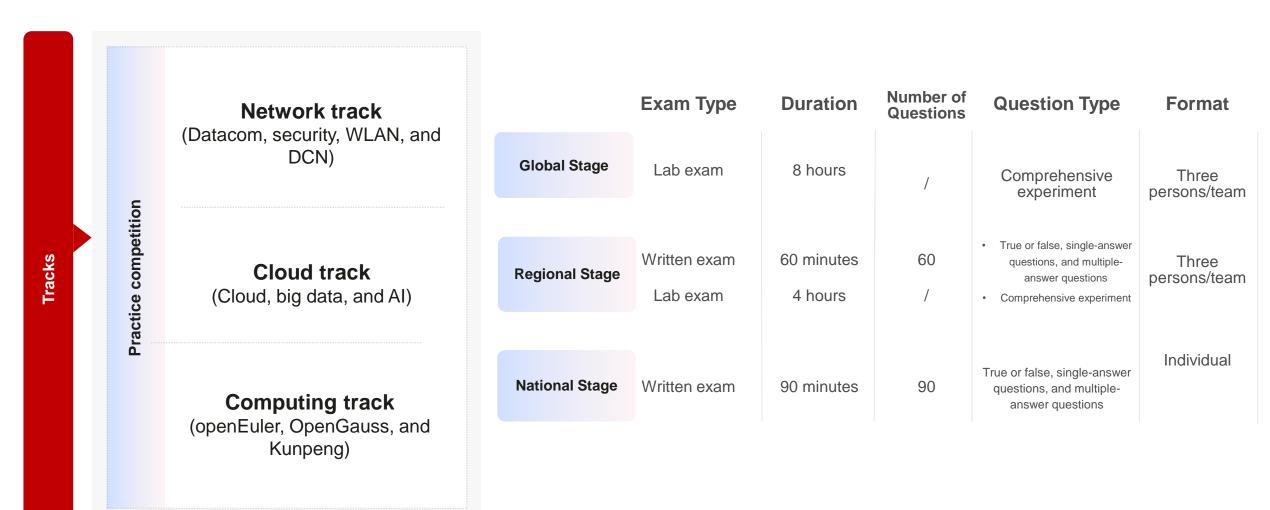
# Practice Competition: National > Regional > Global

- 1. The Practice Competition has three stages: national, regional, and global.
- 2. Huawei HQ will provide the theory and lab exam questions, the exam platform, knowledge checkpoints, and knowledge weights that are required for competitions at all levels. (For details, please refer to the exam outlines.)



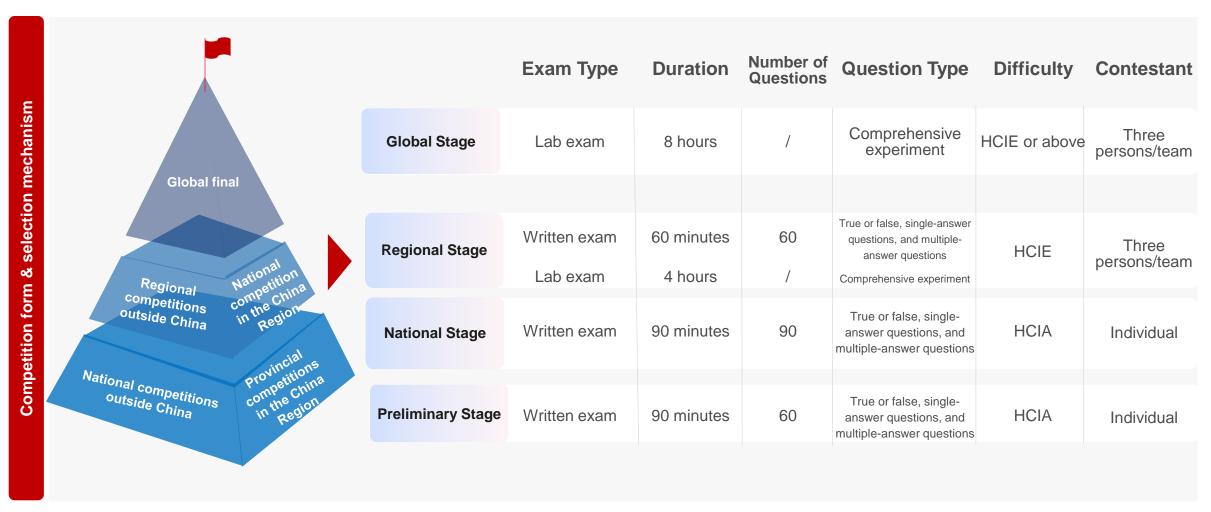


#### **Practice Competition Tracks & Exam Format**



Note: In Regional Stage, the three team members jointly complete one set of written exam questions, and then complete lab tasks and submit one answer sheet for the lab exam. Total score = 30% x Team written exam score + 70% x Team lab exam score.

### Form and arrangement of the practice competition



Note: In Regional Stage, the three team members jointly complete one set of written exam questions, and then complete lab tasks and submit one answer sheet for the lab exam. Total score = 30% x Team written exam score + 70% x Team lab exam score.

#### **Students Prizes**

## 03. Regional Final Awards

Practice Competition Track	Award	Prize
	Grand Prize	
Materials	First Prize	
Network	Second Prize	
	Third Prize	
	Grand Prize	Prizes, Medals & Certificates
	First Prize	will be awarded to Students
Cloud	Second Prize	and Team Instructors at both Regional and Global
	Third Prize	Competition levels
	Grand Prize	
	First Prize	
Computing	Second Prize	
	Third Prize	

- Prizes will consist of Huawei products or vouchers and delivered in accordance with applicable local laws and regulations;
- . Team Instructors will also receive the same medals and prizes as their winning student team members
- . Huawei reserves the right to alter the prizes in their specifics and quantities at its own convenience





**Huawei ICT Academy** 



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**Huawei Certifications** 



## **Practice Competition Competition Format**

# 06. Competition Form

Stage	Venue	Exam	Duration (minutes)	Questio n quantity	Question Type	Total score
National Final (Individual Event)	Online	Theory exam (Individual exam)	90	90	true or false, single-answer, and multiple-answer questions	1000
Regional Final	Regional	Theory exam (Individual exam)	60	60	true or false, single-answer, and multiple-answer questions	1000
(Team Event)		Lab exam (Team Exam)	240	/	Comprehensive scenario-based lab exam	1000
Global Final	Offline	Lab exam	480	1	Comprehensive scenario-based lab exam	1000

#### Note:

At Regional Level, students achieving a Huawei Career Certifications can gain extra points. Extra points are awarded according to the level of certification achieved:

- 1) HCIE, plus 200 points;
- 2) HCIP, plus 100 points;
- 3) HCIA, plus 50 points;
- 4) Points can be accumulated, but the upper limit cannot exceed 200 points.



https://e.huawei.com/en/talent/portal/#/filepreview?fileUploadType=S3&dlType=Attachment&attachmentType=AttachmentTalent&attachmentMask=security%3A71F4413D0940258342F302E4%3AF4CB06CBDDADD3309DE57E72B25B364A14DB16ADD0&verify=security%3A092FA67C1079134995F7764F%3ACA8F21B1772988C7687689F2930E3A8E9BB38119C54453EBC0C37588E47925E1DE7EC15F1DD34C0EC2F2FFC7B8AE2E9A4084FC6FB5DFBF6E05C91FAB2FA0162DE0C7B0B2770553D0A1889C5F3AF80BD9&fileType=pdf&name=Huawei%20ICT%20Competition%202023%E2%80%932024%20Manual%2020240510.pdf



# 07. Competition Rules

- This competition is open to students from Universities & Colleges that are Huawei ICT Academies or would like to register as an Huawei ICT Academy
- Participants must be currently enrolled as a student
- Participants may only Register for one Competition (Practice, Innovation or Mobile App Programming)
- Participants that have taken part at the Global Final level for a specific Competition/ track in previous years will not be able to participate in the same track at Global Final level again, <u>however they may register and</u> participate on a different Competition/ track
- The <u>Practice Competition</u> includes 3 Tracks; Network, Cloud and Computing. Participants may only register for one track (*Please check learning requirements for each Competition/ Track and carefully choose the best track for yourself*)
- Participants must make themselves available for National, Regional and Global level team practice sessions and exams as per exam schedule
- Participants must have access to PCs with Internet access. For National and Regional level exams contestants need to use either their own or university/college PC/laptop (with Internet access) to complete the online exam

#### 1. National Competition Level

Individual online multiple-choice exam

- 2. Regional Final (Team competition: team must comprise of 3 students and 1 instructor):
- · The Regional final is a team event and comprises of both written and Practical Lab elements
  - Individual online multiple-choice exam
  - · Team Lab Practical exam
- Instructors can provide support for learning and exam preparation but cannot participate in the actual written and practical lab exams themselves
- 3. Global Final (Team competition: global final competition will take place in Shenzhen, China)
- · The global final is a team event and comprises of a Practical Lab exam only
- · Selected Regional winning teams will take part in the Global final Competition

# 9<sup>th</sup> Practice Competition Rules

<sup>\*</sup>Huawei reserves the right of final decision.

#### **Bonus points for certification**

Track	Technical Domain	Level	Certification
			HCIA-Datacom, HCIA-WLAN, HCIA-Security
Network Track			HCIP-Datacom-Advanced Routing & Switching Technology, HCIP-Datacom-Network Automation Developer, HCIP-Datacom-SD-WAN Planning and Deployment, HCIP-Datacom-Enterprise Network Solution Design, HCIP-Datacom-WAN Planning and Deployment, HCIP-Datacom-Carrier IP Bearer, HCIP-Datacom-Carrier Cloud Bearer, HCIP-Data Center Network, HCIP-Datacom-Campus Network Planning and Deployment, HCIP-WLAN, HCIP-Security
			HCIE-Datacom, HCIE-Data Center Network, HCIE-Datacom-Carrier, HCIE-Security, HCIE-WLAN
		HCIA	HCIA-Cloud Service, HCIA-Cloud Computing, HCIA-Cloud Network Integration, HCIA-Big Data, HCIA-AI, HCIA-AI Solution
Cloud Track	Cloud BigData Al	HCIP	HCIP-Cloud Service DevOps Engineer, HCIP-Cloud Service Solutions Architect, HCIP-Cloud Computing, HCIP-Big Data Developer, HCIP-AI-EI Developer, HCIP-AI-Ascend Developer, HCIP-AI-MindSpore Developer
		HCIE	HCIE-Cloud Service Solutions Architect, HCIE-Cloud Computing, HCIE-Big Data-Data Mining
	OpenEuler	HCIA	HCIA-openEuler, HCIA-openGauss, HCIA-Kunpeng Application Developer
Computing Track	OpenGauss Kunpeng Application	HCIP	HCIP-openEuler, HCIP-openGauss, HCIP-Kunpeng Application Developer
	Developer	HCIE	HCIE-openEuler, HCIE-openGauss
		HCIA	HCIA-AI, HCIA-AI Solution
Al Track	AI	HCIP	HCIP-AI-EI Developer, HCIP-AI-Ascend Developer, HCIP-AI-MindSpore Developer, HCIP-AI Solution Architect
		HCIE	HCIE-Al Solution Architect

Starting from January 1, 2024 until the preliminary stage ends, contestants can earn 50 bonus points for passing any HCIA-XXX certification, 100 bonus points for any HCIP-XXX certification, and 200 bonus points for any HCIE-XXX certification.

Contestants can combine these bonus points up to a maximum of 200 points.

It's important to note that the Uniportal account used for competition registration must match the one used for certification, or no bonus points will be awarded.

#### **Exam Weighting & Marking - Network Track**

The Network Track exam covers knowledge about datacom, DCN, security, and WLAN technologies, including but not limited to routing protocols, Layer 2 switching technologies, IPv6 technologies, data center networks, Huawei firewall features, network security, VPN technologies, and WLAN networking and configuration.

Stage	National Stage				Global Stage
Direction		Written Exam	Lab Exam	3	
Datacom	40%	40%	50%	50%	
DCN	20%	20%	0%	0%	
Security	20%	20%	25%	20%	
WLAN	20%	20%	25%	30%	

### **Exam Weighting & Marking - Cloud Track**

The Cloud Track covers knowledge about cloud, AI, and big data, including but not limited to the knowledge of cloud computing, cloud native, Huawei Cloud products and services, Huawei Cloud solutions, basics of big data, basic principles and applications of big data components, big data mining, AI technologies and applications, machine learning, deep learning, computer vision, and Natural Language Processing (NLP).

Stage Direction	National Stage	Regional Stage	Global Stage
Cloud	40%	40%	40%
Big Data	20%	15%	15%
AI	40%	45%	45%

### **Exam Weighting & Marking - Computing Track**

The Computing Track will test knowledge on openEuler, OpenGauss, and Kunpeng Application Developer, including but not limited to openEuler development history, basic operations, memory, processes, and file systems; OpenGauss overview, connections, access, databases (fully-encrypted and tamper-proof), cluster management, monitoring, and O&M; Kunpeng architecture and solution, application development, application porting, and performance tuning.

Stage Direction	National Stage	Regional Stage	Global Stage
openEuler	50%	50%	50%
openGauss	30%	30%	30%
Kunpeng Application Developer	20%	20%	20%

## **Certification version adapted to the competition**

Track	Divoction	Certification Version			
Паск	Direction	HCIA	HCIP	HCIE	
	Cloud Service	HCIA-Cloud Service V3.5	HCIP-Cloud Service Solutions Architect V3.0	HCIE-Cloud Service Solutions Architect V2.0	
Q1 1 T 1	Big Data	HCIA-Big Data V3.5	HCIP-Big Data Developer V2.0	HCIE-Big Data-Data Mining V3.0	
Cloud Track	Al	HCIA-AI V3.5 HCIA-AI Solution V1.0	HCIP-AI-EI Developer V2.0 HCIP-AI-MindSpore Developer V1.0 HCIP-AI-Ascend Developer V1.0 HCIP-AI Solution Architect V1.0	HCIE-AI Solution Architect V1.0	
Network Track	Datacom	HCIA-Datacom V1.0	HCIP-Datacom Core Technology V1.0 HCIP-Datacom-Advanced Routing & Switching Technology V1.0 HCIP-Datacom-Network Automation Developer V1.0	HCIE-Datacom V1.0	
	DCN		HCIP-Data Center Network V1.0	HCIE-Data Center Network V1.0	
	Security	HCIA-Security V4.0	HCIP-Security V4.0	HCIE-Security V3.0	
	WLAN	HCIA-WLAN V3.0	HCIP-WLAN V2.0	HCIE-WLAN V1.0	
	openEuler	HCIA-openEuler V1.0	HCIP-openEuler V1.0	HCIE-openEuler V1.0	
Computing Track	openGauss	HCIA-openGauss V1.0	HCIP-openGauss V1.0	HCIE-openGauss V1.0	
Companing Track	Kunpeng	HCIA-Kunpeng Application Developer V2.0	HCIP-Kunpeng Application Developer V1.0		

# Learning e-space for practice competition

Track	Course	Language	Course Link
Cloud Track	Huawei ICT Competition – Cloud Track Learning Space (China Region)	Chinese	https://talent.shixizhi.huawei.com/course/1365189427395223 554/application- view?courseId=1679790481395523585&appld=55475934304 5419008&classId=&appType=1
Network Track	Huawei ICT Competition – Network Track Learning Space (China Region)	Chinese	https://talent.shixizhi.huawei.com/course/1365189427395223 554/application- view?courseId=1680760185478529026&appld=55475906522 2434816&classId=&appType=1
Computing Track	Huawei ICT Competition – Computing Track Learning Space (China Region)	Chinese	https://talent.shixizhi.huawei.com/course/1365189427395223 554/application- view?courseId=1680780940173983746&appld=55475612314 8865536&classId=&appType=1
Ascend Al Track	Huawei ICT Competition – Ascend AI Track Learning Space (China Region)	Chinese	https://talent.shixizhi.huawei.com/course/1365189427395223 554/application- view?courseId=1717743377712234498&appld=59092964290 8360704&classId=&appType=1&status=&sxz- lang=zh_CN&tenantId=1365189427395223554
Cloud Track	Huawei ICT Competition - Cloud Track Learning Space	English	https://talent.shixizhi.huawei.com/course/1365189427395223 554/application- view?courseId=1592061022026975871&appld=55475828135 3154560&classId=&appType=1
Network Track	Huawei ICT Competition - Network Track Learning Space	English	https://talent.shixizhi.huawei.com/course/1365189427395223 554/application- view?courseId=1592061022026976487&appld=55475879598 1672448&classId=&appType=1
Computing Track	Huawei ICT Competition - Computing Track Learning Space	English	https://talent.shixizhi.huawei.com/course/1365189427395223 554/application- view?courseId=1592061022026975443&appld=55475961335 5053056&classId=&appType=1



#### Huawei ICT Competition 2024-2025 Europe



I. C. The Future

Competition Registration



Learning Space



**Upload Project** 



01. Introduction - Innovation Competition

#### **Students Prizes**

#### 02. Regional Final Awards

Competition Level	Award	Prize
Regional	Grand Prize	
	First Prize	Prizes, Medals & Certificates will be awarded to Students and Team Instructors at both Regional
	Second Prize	and Global Competition levels
	Third Prize	





**Huawei ICT Academy** 



**Facebook** 

**Huawei Certifications** 

- Prizes will consist of Huawei products or vouchers and delivered in accordance with applicable local laws and regulations
- Team Instructors will also receive the same medals and prizes as their winning student team members
- Huawei Reserves the right to alter the prizes in their specifics and quantities at its own convenience.



#### Introduction to the Examination Outline for the Innovation Competition

#### For further details, see the following documents:





#### 04. Review Methods

The Innovation Competition is a team competition

- 1. National/ Regional Competition Format:
- Presentation (15 minutes) and panel assessment (5 minutes)
- Countries and Region will arrange the National & Regional level panels + presentation order for this on-line competition

#### 2. Global Final Format:

- Presentation (15 minutes) and panel assessment (5 minutes)
- Huawei HQ will arrange the Global level panel + presentation order for this on-site competition

Review item	Score	Key review points
Creativity	30	The solution can resolve real-life issues, and there is no well-known similar solution in the industry. Breakthroughs and innovations are made in business models, management and operation, process optimization, and application scenarios.
System/ Technical complexity	25	Participants use Huawei Al-related technologies and, in the presentation, specify which ones are used. The participant is able to integrate multiple ICTs by comprehensively using Huawei's resources and platforms. These resources and technologies are of great value to the solution.
Social value	15	The project benefits the public or has potential for commercial profitability.
Functional completeness	15	The solution considers all aspects of the issues to be resolved and offers a complete set of functions for all possible situations.
Presentation	15	The presentation is fluent. Presenters can answer questions from judges and have clear opinions.

The Innovation Competition Organizing Committee will make decisions on the final global review team Panel Members (Panel members will consist of Academia, Industry and Huawei R& D experts

The Innovation Competition Organizing Committee reserve the right to interpret the rules of the Innovation Competition

## 9<sup>th</sup> Innovation Competition Rules

#### 06. Entry Requirements/ Competition Rules

Required materials	Application form	Design scheme	Presentation	Demo	
Format	WORD	WORD	PPT	VIDEO	
Upload	Team information and entry introduction	Introduce your design, with a focus on the technologies used and the value of your entry.	Suggestion - Divide your presentation for the final into five parts, to including; problem description, solution design, technology selection, function implementation, and effect and value.	Suggested video duration for the preliminary round: around 5 minutes Suggested video duration for the final: ≤ 3 minutes	
Description	Mandatory (using template provided)				

# Check Innovation Competition registration page for further details

#### 1. Entry requirements & Competition Rules:

- Participants must use Huawei Al-related technologies (like MindSpore, CANN, and ModelArts). Those who
  do not use Huawei's technologies will not be eligible for the competition. They may combine these
  technologies with the hardware and software resources of their own higher education institution to design an
  entry that addresses specific challenges in industries. Huawei also encourages participants to combine Al
  with other technologies, such as cloud computing, big data, VR/AR, and IoT.
- Entries must be able to solve specific issues in real-life scenarios or in a certain industry, which can be a
  software system or a "software + hardware" platform featuring device-pipe-cloud synergy. They need to be
  innovative, practical, and originally designed by teams. Teams need to ensure that finalized entries are fully
  functional with no glaring issues or deficiencies, and that logic and operation are both smooth.
- Teams must specify the Huawei technologies they use in their entries, by highlighting the technologies either
  in the solution architecture diagram or in the process flow diagram or relevant codes. It is advised that a
  finalized entry describes the design scheme, functions, value, and issues it is designed to resolve.
- Designs must not violate national laws and regulations or a person's right to privacy. Designs must not contain discriminatory content relating to gender, race, nationality, age, disability, religion, or any other characteristic protected by law.
- It is prohibited to directly use previous entries of other contests or competitions without making any improvements. Otherwise, the team will be disqualified.
- Participants must be currently enrolled undergraduates, master's students, and PhD students. Each team
  needs to include three students and one instructor who must come from the same college/university. It is
  encouraged to clearly specify duties between team members and build a team of students from different
  grades to gather complementary skills and maximize their ability to innovate.
- Each contestant can participate in only one track. (Those who participate in the Practice Competition must not participate in the Innovation Competition, and vice versa.) In the Innovation Competition, participants must first register and submit their projects within the specified time frame. Those whose projects pass the selection process will advance in the competition. It is not allowed to change the instructor and students of a team after successful registration.
- Participants that have taken part at the Global Final level for a specific Competition/ track in previous years
  will not be able to participate in the same track at Global Final level again, however they may register and
  participate on a different Competition/ track
- · The Innovation Competition is a 'Team Competition' (A team consists of 3 students + 1 instructor)
- · Participants must be currently enrolled as a student
- Participants must make themselves available for National, Regional and Global level team practice sessions and presentations to Panels as per exam schedule
- Participants must have access to PCs with Internet access. For National and Regional level exams contestants need to use either their own or university/college PC/laptop (with Internet access) to complete their presentation

# Thank you.

把数字世界带入每个人、每个家庭、每个组织,构建万物互联的智能世界。

Bring digital to every person, home and organization for a fully connected, intelligent world.

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