Building Talent Ecosystem and Improving Digital Skills of TVET

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Huawei: Leading provider of ICT infrastructure and smart devices

Vision & mission

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

195,000 employees

170+ countries and regions

No. 44 on Fortune Global 500

No. 2 in R&D investment

54.8% of employees are in R&D
Focusing on ICT to provide products, solutions, and services to three customer groups

- **Consumers**
  - Devices: Smartphones, Wearables, Smart home devices, Telematics, Lifestyle services across all scenarios
  - Intelligent Automotive Solution: Intelligent driving, Intelligent sensing, Intelligent vehicle cloud, Intelligent communication connectivity, Intelligent cockpit
  - Connectivity: Wireless network, Data communications, Transport network, Access network, Core network
  - Computing: Kunpeng computing, Ascend computing, Cluster computing, Data storage
  - Cloud: Public cloud, Hybrid cloud

- **Carriers**
  - Information transmission

- **Enterprises**
  - Digital Power: Smart PV, Site power, Data center facility, DriveOne, Embedded power, Integrated smart power

- **Intelligence**
  - Information learning & inference
  - Information processing & storage

Bringing digital to every person, home and organization for a fully connected, intelligent world.
ICT talent supply and demand gap

Forecast by the World Bank in 2017: There will be a global ICT talent of 10 million in the next 10 years.
Become a black land for talent development, Improve digital skills of TVET

**Education talent ecosystem**

- University-Enterprise Collaboration
- Fair quality education

- Huawei ICT Academy: 1900+
- ICT Academy teachers: 7000+
- Students trained per year: 150,000+
- 6th Huawei ICT Competition: 2000+ universities / colleges in 85 countries/regions

**Industry talent ecosystem**

- Cultivate Digital Talent
- Promote digital transformation

- Customers trainees per year: 45,000+
- National digital talent development
- Enterprise digital transformation talent development

**Public talent ecosystem**

- Popularize Digital Skills
- Ensure sustainable competitiveness

- Huawei Authorized Learning Partners (HALPs): 120+
- HALP trainees per year: 85,000+
- Global Huawei Certified ICT Experts (HCIEs): 17,000+

Content: (Huawei certification/700+ courses/teaching material/labs) + Platform (Huawei Talent) + Activity (Huawei ICT Competition/Job fair)

Data by December 2021
Building a healthy talent ecosystem and revitalizing the ICT industry

**TVET**: Integrate industry and education to streamline the supply and demand of ICT talent

### Building Talent Alliances
1. Huawei ICT Academy
2. ASC (Academy Supporting Center)
3. International Organization

### Improving Talent Skills
4. Teacher Enablement
5. Enterprise-University Collaboration

### Students with ICT knowledge

### Developing Talent Standards
6. Academy Curricula
7. ICT Textbook
8. Huawei Certification

### Promoting Talent Value
9. Huawei ICT Competition
10. Huawei ICT Talent Job Fair

### ICT Talent for sustainable digital society
Develop Huawei ICT Academy, promote the university-enterprise collaboration to cultivate ICT talent

2021: 1971 partner universities and colleges, 7000+ teachers and 150,000+ active students

2026: 7000+ partner universities and colleges, 1.5+ million students
Develop Huawei ICT Academy, promote the university-enterprise collaboration to cultivate ICT talent

**Huawei**
- Course authorization
- Teaching enablement
- Learning resource

**Universities**
- Education plan
- Experiment conditions
- Certified Instructors

**Huawei ICT Academy**
Huawei ICT Academy is a partnership between Huawei and Academies around the world. The project aims to transfer ICTs and product knowledge to university students around the world, encourage students to participate in Huawei's technical certification, and cultivate innovative and application-oriented talent for the society and ICT industry chain.

**Students**
- ICT skills
- Hands-on experience
- Career certification
Abundant teaching resources, theoretical and practical curriculum for colleges and universities

<table>
<thead>
<tr>
<th>Industry Course</th>
<th>Smart energy</th>
<th>Smart transportation</th>
<th>Smart healthcare</th>
<th>Intelligent finance</th>
<th>Smart manufacturing</th>
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</thead>
<tbody>
<tr>
<td>Practice Course</td>
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<td>Connectivity</td>
<td>Basics and Practices of Cyber Security</td>
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<td>App development</td>
<td>openGauss</td>
<td>openEuler</td>
<td>HarmonyOS</td>
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<td>Professional Course</td>
<td>WLAN</td>
<td>5G technology and application</td>
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<td>Routing &amp; Switching Technology</td>
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<td>Data Communication and Network</td>
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<td>Introductory Course</td>
<td>Search and Artificial Intelligence</td>
<td>Information Representation and Data Organization</td>
<td>Computer Network</td>
<td>Data</td>
<td>5G</td>
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<td>Algorithm and Program Design</td>
<td>Computers and Operating System</td>
<td>Mobile App Development</td>
<td>AI</td>
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Course suite: outlines, MOOCs, teaching slides, e-textbooks, lab manual for teachers, lab manual for students, lab construction guide, and mid-term/end-of-term test questions
Develop the Academy Support Center (ASC) to ensure the smooth operation of Huawei ICT Academies

ASC (Academy Support Center) is an organization certified and authorized by Huawei to facilitate the cooperation between Huawei and the local Huawei ICT Academy, and to provide support for teaching and running of the academy.

**Huawei**

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ASC

Teacher enablement
Operations support
Activity support
Resource support

10

Countries covered by ASC

**Huawei ICT Academies**

180+

Huawei ICT Academies supported by ASC

**Students**

150,000+

Students active per year

Data by December 2021
Huawei certification: Build a comprehensive ICT certification system to improve digital skills of TVET

Cloud Service & Platform
- HarmonyOS
- IoT
- openGauss
- Cloud
- MDC
- GaussDB
- Big Data
- openEuler
- Kunpeng Application Developer
- AI

ICT Infrastructure
- Storage
- Enterprise Communication
- Intelligent Computing
- Intelligent Vision
- Data Center
- Datacom
- Security
- WLAN
- SDN
- Transmission
- Access
- LTE
- 5G

Technology Fields
- Cloud Service & Platform
- ICT Infrastructure

Certification exams
- HarmonyOS
- IoT
- openGauss
- Cloud
- MDC
- GaussDB
- Big Data
- openEuler
- Kunpeng Application Developer
- AI

Testing centers
- Data Center
- Datacom
- Security
- WLAN
- LTE
- 5G

Huawei certified talent
- 23
- 100+
- 5000+
- 550,000+
- 17,000+

HCIEs

Data By December 2021
HALPs around the world

2021: 121 HALPs, 800+ instructors, 40+ countries and regions.
Collaborate with HALPs to build the Huawei talent ecosystem

Our Advantages

Unique Identity    Marketing Support    Train The Trainer (TTT)    Huge Returns    Technical Support
Huawei ICT Competition: an international competition and exchange platform

Huawei ICT Competition 2021-2022

1st 2015-2016
7550 students
499 universities and colleges
30 Chinese teams in the final

2nd 2016-2017
15,000+ students
658 universities and colleges
7 countries/regions
33 teams in the global final

3rd 2017-2018
40,000+ students
800+ universities and colleges
32 countries/regions
23 teams in the global final

4th 2018-2019
100,000+ students
1600+ universities and colleges
61 countries/regions
49 teams in the global final

5th 2019-2020
150,000 students
2000+ universities and colleges
82 countries/regions
109 teams in the global final

6th 2021-2022
150,000 students
2000+ universities and colleges
85 countries/regions
Be included in the Higher Education Competition Rankings by the China Association of Higher Education

Data By December 2021
Huawei Talent: One-stop digital talent development platform, assist equity in education of TVET

**High-quality MOOCs**
- 261 high-quality courses
- 23 technical domains in the ICT field

**Online Labs**
Online labs based on cloud computing, solving practical operation problems

**Live streaming**
Live streaming, synchronization of lecture notes, and interaction between teachers and students, improving learning efficiency

**Mock exams**
Online mock exams with easy preparation

170+ Countries/Regions
1900+ ICT Academies
120+ HALPs
1.21+ million Trainees

Data By December 2021

https://e.huawei.com/en/talent/#/
Shenzhen Polytechnic & Huawei: Integrating industry practices and education

Background

- Shenzhen Polytechnic is known as a pioneer of higher vocational education in China and aims to build a "world-class vocational college".
- As ICTs and new technologies develop rapidly, Shenzhen Polytechnic hopes to cooperate with Huawei to update courses according to latest industry practices, helping graduates become more competitive.

Cooperation Process

<table>
<thead>
<tr>
<th>Start</th>
<th>Activities</th>
<th>Achievements</th>
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<tbody>
<tr>
<td>In 2011, Shenzhen Polytechnic became the first Huawei ICT Academy among Higher Vocational Colleges</td>
<td>- Participate in Huawei trainer trainings - Integrate Huawei certification into the education system - Build practical training conditions - Participate in Huawei ICT competition</td>
<td>Course: By the end of 2021, 3500 students had obtained Huawei certifications, 279 of them certified in HCIE. Teachers: Over 30 teachers have passed HCAI certification. The 1+X network textbook series compiled by teachers has been included in the 13th Five-Year Plan teaching material, with an annual sales of over 100,000 copies. The cooperation practice won the National Teaching Achievement Award in 2018.</td>
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"We have worked with Huawei to explore a new model of university-enterprise cooperation that complements each other's strengths, overcoming difficulties in integrating industry practice and education. We have integrated Huawei certificates into courses, benefiting both universities and enterprises.

— Ma Xiaoming, Former Vice President of Shenzhen Polytechnic/the First Author of National Teaching Achievement Award
Thank you.

Facebook: Huawei ICT Academy

WeChat Official Account: Huawei ICT Academy

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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