

Regional Centre for Space Science and Technology Education affiliated to the United Nations

Prof. Dr. WENG Jingnong

Dean, International School, Beihang University

Executive Director, the UN Regional Centre in China

Sep. 12, 2019 Beijing, China



北京航空航天大学
BEIHANG UNIVERSITY



UNOOSA Structure



The Office is headed by a [Director](#) and has two sections: the Space Applications Section, which organizes and carries out the United Nations Programme on Space Applications, and the Committee, Policy and Legal Affairs Section, which provides substantive secretariat services to the [Committee](#), its two subcommittees and its working groups. The Committee, Policy and Legal Affairs Section also prepares and distributes reports and publications on international space activities and on international space law.

Ms. Simonetta Di Pippo of Italy serves as Director of the Office since March 2014.

1

Programme on Space Applications

2

Regional Centre affiliated to the United Nations

3

Capacity Building Research





UNITED NATIONS
Office for Outer Space Affairs

1

Programme on Space Applications

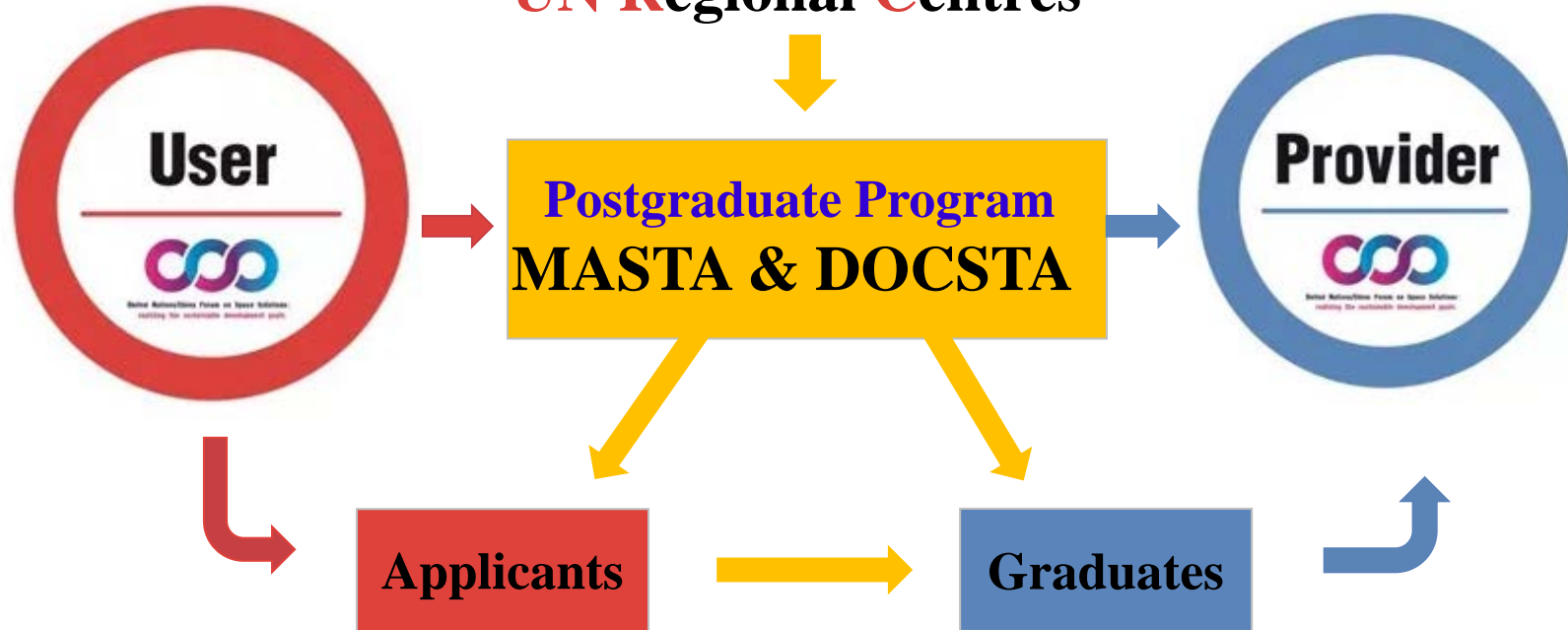


Programme on Space Applications

On January 7, 1970, First United Nations Expert on Space Applications appointed Humberto Ricciardi of Argentina became the first UN Expert on Space Applications, a post that was established within the Office for Outer Space Affairs as a result of UNISPACE I recommendation. Upon his proposal, the United Nations Programme on Space Applications was created in 1971 to provide technical assistance to developing countries in particular, in support of their national efforts to develop space activities.

UN Programme on Space Applications

UN Regional Centres

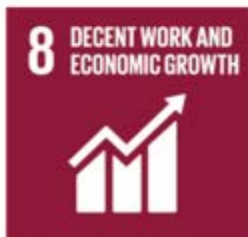


Recommended by the space agencies of the Member States (MS).

Contribute to the development of space applications in the MS.



SUSTAINABLE DEVELOPMENT GOALS



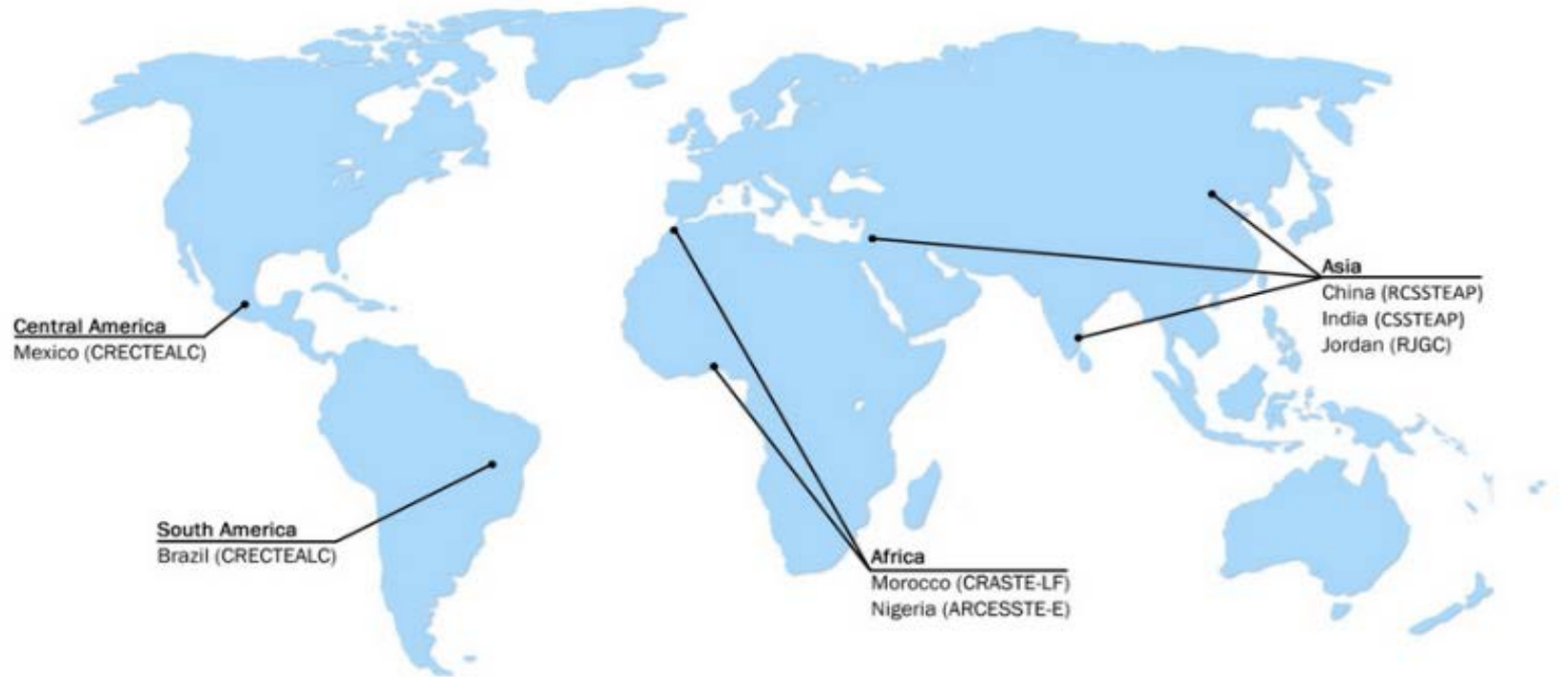


UNITED NATIONS
Office for Outer Space Affairs

2

UNOOSA Regional Centre for Space

Regional Centres for Space Science and Technology Education
(affiliated to the United Nations)



CSSTEAP India
(inaugurated in
1995)

CRASTE-LF
Morocco
(inaugurated in
1998)

ARCESSTE-E
Nigeria
(inaugurated in
1998)

CRECTEALC
Mexico and Brazil
(inaugurated in
2003)

RCSSTEWA /
RJGC Jordan
(inaugurated on 29
May 2012)

RCCSTEAP China
(inaugurated in
2014)

73 countries among the 6 Regional Centres



Regional Centre for Space Science and Technology Education in Asia and the Pacific (China) (Affiliated to the United Nations)

联合国附属空间科技教育亚太区域中心(中国)



Algeria



Argentina



Bangladesh



Bolivia



Brazil



China



Indonesia



Pakistan



Peru



Venezuela

■ **The Establishment of RCSSTEAP:** November 17, 2014

■ **Mission:** Promoting the peaceful use of space technologies for the benefit of all humankind.

■ **Vision:** Openness, Innovation, Inclusiveness

■ **Principle:** Down to the Earth while Aiming High

2013.2

Application
Making a proposal at the 50th
session of Scientific and Technical
Subcommittee of UN COPUOS

2013.9

Passing Evaluation Mission by
UNOOSA Expert Group (experts
from Greece, India, Iran, Japan,
Mexico, Pakistan)

2014.6

Attending the Director
Meeting of UN-Regional
Centres as an observer

2014.9

Organizing International Space
Education Forum at the 65th
International Astronautical
Congress (IAC), Toronto

2014.11

The Inauguration Ceremony
The 1st Meeting of the Governing
Board

2013.6

Approved by the Subcommittee
of COPUOS at the 56th session of
COPUOS

2014.3

Approved by the State
Council of China

2014.7

Organizing a training course
for Morocco (CRASTE-LF)

2014.10

Signing agreements with
contracting parties



Regional Centre for Space Science and Technology Education
in Asia and the Pacific (China)(Affiliated to the United Nations)
联合国附属空间科技教育亚太区域中心(中国)





Degree Programs and Short Training Programs



Master's Program

**260 in total, 21 countries, 159
participants have been granted
Master's Degree**

Doctoral Program

**60 in total, 13 countries, 12
participants have been granted
Doctoral Degree**

Short Training Programs

About 1500 in total, 68 countries

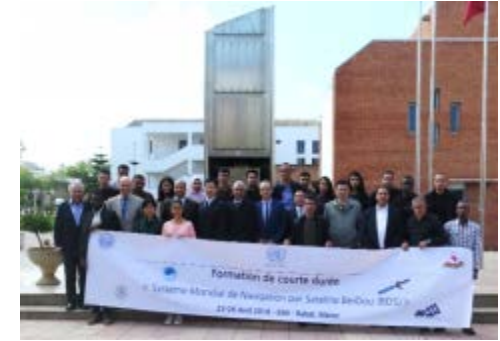
Short Training Programs in 2018



GNSS and BeiDou System Deep Understanding Training
Tunisia, Apr. 11-13, 2018



Training on Space Cooperation for Global Health
China, Apr. 12-26, 2018



CRASTE-LF & RCSSTEAP-China GNSS Workshop
Morocco, Apr. 23-26, 2018



GNSS and BeiDou System Deep Understanding Training
Sudan, Sept. 24-25, 2018

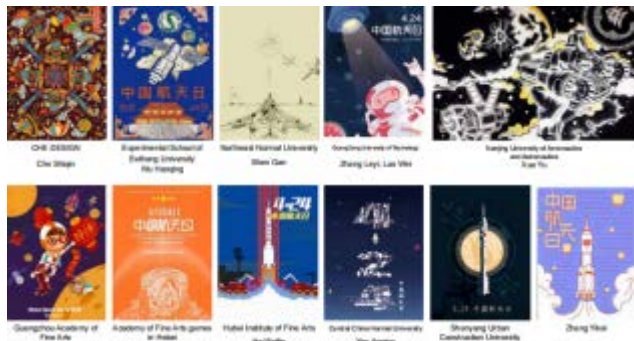


Short Training in Satellite Technology CRASTE-LF
Morocco, Oct. 22-26, 2018



International Training Programme "Space based technology for emergency response"
China, Oct. 28-Nov. 1, 2018

Outreach 2018



Poster Design Contest for China Space Day
April, 2018



Journey of Chinese Aerospace Technology and Culture
March-May, 2018



UNISPACE+50 Aerospace Exhibition in Vienna
June, 2018





中国航天

长城
China Great Wall
Industry Corporation

China Academy of
Space Technology

China Centre for
Resources Satellite
Data and Application

SuperMap



China Academy of
Launch Vehicle Technology

Shanghai Academy of
Spaceflight Technology



BeiDou Navigation
Satellite System

UniStrong
合众思壮

Beijing UniStrong
Co., Ltd.



Beijing BDStar
Navigation Co., Ltd.

ChinaRS 中科遥感

ChinaRS Geoinformatics
Co., Ltd.



Beijing Aerospace TITAN
Technology Co., Ltd.



Twenty First Century
Aerospace Technology
Co., Ltd.



APSCO
Asia-Pacific Space Cooperation Organization

应急管理部国家减灾中心
Disaster Reduction Center, Ministry of
Emergency Management



UN-SPIDER
Beijing Office



International Centre on Space Technologies for
Natural and Cultural Heritage
under the auspices of UNESCO

Nssc

中国科学院国家空间科学中心
National Space Science Center, CAS



Space Debris Observation
and Data Application Center
China National Space Administration



National Satellite
Meteorological Center



Institute of Remote
Sensing and Digital Earth



National Astronomical
Observatories Chinese
Academy of Sciences



National Time
Service Center



UNITED NATIONS
Office for Outer Space Affairs

Host Institution - Beihang University

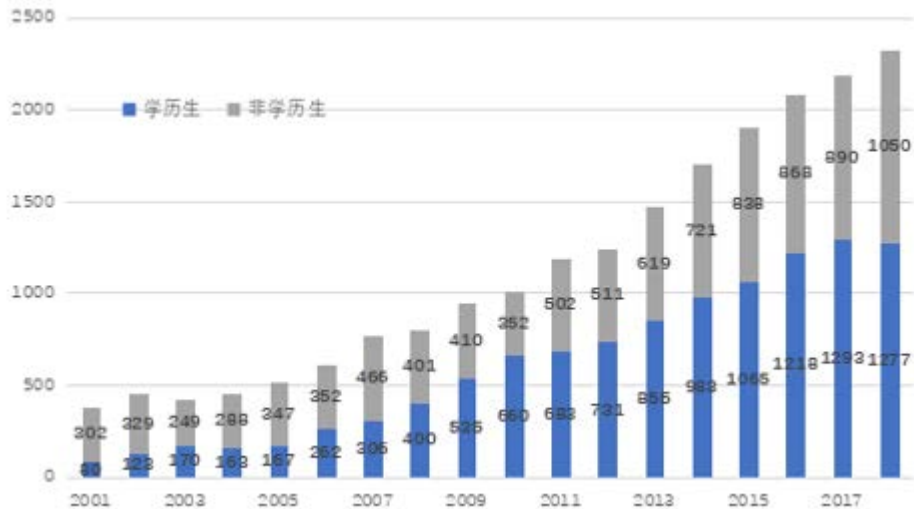


北京航空航天大学
BEIHANG UNIVERSITY

Beihang University was the first aerospace university in China established in 1952. It has been engaged in international space education with the support of CNSA since 2000.

Schools	31
State Key Laboratories	8
Undergraduate Programs	57
Master's Programs	144
Doctoral Programs	49
Students	29,211
Undergraduates	15,620
Graduates	13,591
International students	2,367
Faculty & Staff	3,885





2200+ International Students in 2018



北京航空航天大学
BEIHANG UNIVERSITY



from 129 countries

*2018年11月更新数据
Data updated in November 2018

Quality assurance in Space Education/Training

UGII — *Beihang Mode*

U — Hosted by **U**niversity

G — Supported by Chinese **G**overnment

I — Work with Related **I**nternational Organizations
(UNOOSA, APSCO, etc.)

I — **I**ndustry/Enterprise Participation



UNITED NATIONS
Office for Outer Space Affairs



Alliance of Regional Centres for Space Science and Technology Education
(affiliated to the United Nations)

*A global network of partners to advance
the new development of the UN
“Programme on Space Applications”*



the umbrella of UNOOSA



CRETEALC



University Partners

Enterprise Partners



Alliance of Regional Centres (ARC)

***We** are committed to Space Education.*

➤ Member States of Each Regional Centre

Centres	Governing Board Members	UNOOSA Status
ARCSSTE-E 25	Botswana, Cameroon, Egypt, Ethiopia, Eritrea, Ghana, Kenya, Lesotho, Liberia, Mauritius, Malawi, Mozambique, Nigeria, Namibia, Somalia, Swaziland, Sudan, South Sudan, South Africa, Sierra Leone, Tanzania, Gambia, Uganda, Zambia and Zimbabwe	Observer
CRASTE-LF 13	Algeria, Cameroon, Cabo Verde, Central African Republic, Democratic Republic of Congo, Côte d'Ivoire, Gabon, Mauritania, Morocco, Niger, Senegal, Togo and Tunisia	Observer
CRECTEALC 2	Brazil, Mexico	Observer
RCSSETWA 11	Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, State of Palestine, Sudan, Sultanate of Oman, Syria and Yemen	Observer
CSSTEAP 16	DPRK, India, Indonesia, Iran (Islamic Republic of), Kazakhstan, Kyrgyzstan, Malaysia, Mongolia, Myanmar, Nauru, Nepal, Philippines, Republic of Korea, Sri Lanka, Thailand and Uzbekistan	Observer and Chair of Advisory Committee
RCSSTEAP 10	Algeria, Argentina, Bangladesh, Bolivia, Brazil, China, Indonesia, Pakistan, Peru and Venezuela	Observer

➤ Programmes of Each Regional Centre

Centres Programme	ARCSSTE-E	CRASTE-LF	CRECTEALC	CSSTEAP	RCSSTEWA	RCSSTEAP
RS&GIS	✓	✓	✓	✓	✓	✓
SATCOM	✓	✓	✓	✓	✓	✓
GNSS	✓	✓	✓	✓		✓
Micro Sat. Tech/ Small Sat. Mission				✓		✓
Space Law and Policy			✓	✓		✓
SAS & Space Std.	✓		✓	✓	✓	
SATMET	✓	✓		✓	✓	

✓ Programme offered

➤ Glance of Each Regional Centre



ARCSSTE-E, inaugurated in 1998



CRASTE-LF, inaugurated in 1998



CRETEALC, inaugurated in 2003



CSSTEAP, inaugurated in 1995



RCSSTEWA, inaugurated in 2012



RCSSTEAP, inaugurated in 2014

*Co-organized with UNOOSA, Meeting of the Directors of the UN Regional Centres was held on 13-14 June, 2017 at Vienna International Centre. To establish **ARC- Alliance of Regional Centres** was proposed.*



Joint Exhibition during UNISPACE+50



June 2018, Vienna, Austria

Meeting of the Directors



February 2018, Vienna, Austria



June 2018, Vienna, Austria



March 2019, Amman, Jordan

3

Capacity Building Index:

Efforts in China/Under Discussion

What is Capacity Building?

*is the process by which individuals and organizations obtain, improve, and retain the **skills, knowledge, tools, equipment and other resources** needed to do their jobs competently or to a greater capacity (larger scale, larger audience, larger impact, etc.).*

Problems with current capacity building efforts:

- links between needs and supply are weak;*
- training institutions are isolated and communications are limited;*
- insufficient development of teaching materials;*
- alternative methods of capacity building are not adequately recognized;*
- a lack of funding.*

Education Capacity Building Index Framework

Evaluation indicators (Level I)	Evaluation indicators (Level II)
Teacher team building	Qualified teachers
	Management team
	Invited experts
Teaching activities	Degree program
	Training courses
	Academic lectures
	Professional visits
Infrastructure construction	School buildings
	Teaching equipment
	Experimental equipment
Educational environment	Educational platform
	Experimental teaching conditions
	Practical teaching base
Information dissemination	Website
	Publications
	Textbook & teaching materials
Finanical support	Government funding
	Social fund-raising
	Crowdfunding
	Collaborative projects funding



联合国附属空间科技教育亚太区域中心
Regional Centre for Space Science and Technology Education in Asia and the Pacific
(affiliated to the United Nations)



It is easy to predict the future, if you invent it.





Flying with the wings of art

Thank you for your attention!

website: www.is.buaa.edu.cn, www.rcssteap.org

e-mail: wengjn@buaa.edu.cn

