Update of BDS/GNSS International Education and Capacity Building

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Beihang University, Beijing, CHINA
2021-09-XX
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03 Capacity Building
04 Progress in COVID-19
International Education
## International Education

### 1. Postgraduate Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
<th>Countries of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>20</td>
<td>Indonesia, Iran, Mongolia, Pakistan, Peru, Spain, Thailand</td>
</tr>
<tr>
<td>2013</td>
<td>15</td>
<td>Bangladesh, Indonesia, Iran, Mongolia, Pakistan, Peru, Thailand</td>
</tr>
<tr>
<td>2014</td>
<td>13</td>
<td>Bangladesh, Indonesia, Iran, Mongolia, Nigeria, Pakistan, Peru, Thailand</td>
</tr>
<tr>
<td>2015</td>
<td>11</td>
<td>Algeria, Bangladesh, Indonesia, Mozambique, Pakistan, Mongolia, Peru, Thailand</td>
</tr>
<tr>
<td>2016</td>
<td>16</td>
<td>Bangladesh, Bolivia, Brazil, Croatia, Indonesia, Iran, Nigeria, Peru, Thailand, Ukraine, Venezuela</td>
</tr>
<tr>
<td>2017</td>
<td>13</td>
<td>Bangladesh, Bolivia, Iran, Mongolia, Pakistan, Peru, Thailand, Turkey</td>
</tr>
<tr>
<td>2018</td>
<td>10</td>
<td>Ethiopia, Indonesia, Iran, Nigeria, Pakistan, Peru, Turkey</td>
</tr>
<tr>
<td>2019</td>
<td>15</td>
<td>Peru, Bolivia, Iran, Turkey, Mongolia, Myanmar, Nigeria, Pakistan, Togo, Egypt, Algeria</td>
</tr>
<tr>
<td>2020</td>
<td>11</td>
<td>Algeria, Bolivia, Brazil, Indonesia, Laos, Pakistan, Peru, Thailand, Turkey, Venezuela</td>
</tr>
<tr>
<td>2021</td>
<td>11</td>
<td>Algeria, Bolivia, Iran, Pakistan, Thailand, Turkey</td>
</tr>
</tbody>
</table>

- 2012-2021, totally 135
International Education

2. Degree Award

2012-2021 Student Number (totally 109)
3. Training Activities

Series of Lectures on Space Technology Applications

(by UN Regional Centres in China and Jordan, May 14-June 9 2020)

Totally 375 trainee from 21 countries (Algeria, Bahrain, China, Egypt, Ethiopia, India, Iraq, Jordan, Kazakhstan, Kuwait, Lebanon, Morocco, Nigeria, Oman, Russia, Saudi Arabia, South Africa, Sudan, Syria, Tunisia, United Arab Emirates.)
01 International Education

3. Training Activities

Workshop on BDS/GNSS Technologies and Applications in Fighting COVID-2019

(by China-Arab BDS/GNSS center, July 6-7 2020)

Totally 135 trainee from 17 countries (Algeria, Bangladesh, Egypt, Israel, Iraq, Libya, Morocco, Nigeria, Pakistan, Palestine, Saudi Arabia, Tunisia, United Arab Emirates, Jordan and China)
International Education

3. Training Activities

GNSS/BDS Frontier Technologies and Applications

(by APSCO, Aug. 24-Sep. 5 2020)

Totally 88 trainee from 19 countries (Algeria, Bangladesh, Bolivia, China, Ethiopia, Iran, Indonesia, Jordan, Mongolia, Myanmar, Nigeria, Pakistan, Peru, Russia, Turkey, Togo, Uzi, Vietnam)
Exchange & Cooperation
Exchange & Cooperation

1. International Space Education Cooperation Forum (2019)

(Dec. 9, 2019 in Beijing)

Participants: Representative of UNOOSA, Directors of the UN Regional Centres, China National Space Administration, Beihang University
Exchange & Cooperation

   (Sep. 11-28, 2020)

The 14th meeting of WG4

Subgroup meeting for Education and Training
Exchange & Cooperation


Cooperation on training activities such as short-term training, summer school and degree Program.
Exchange & Cooperation


Discussion on the Establishment of China-Jordan joint BDS/GNSS Education and Training Center (Jordan)
5. Education Cooperation with other countries

- **China-Uzbekistan Cooperation (2020)**
  - Joint GNSS Lab in TUIT
  - Network education and training platform
  - Degree program and training activities

- **China-Pakistan Cooperation (2021)**
  - For the past 10 years, 74 Pakistan graduates have got their degrees from Beihang University, 25 majoring in GNSS.
  - Co-construction BeiDou Belt & Road School with NUST
  - Cooperation with Institute of Space Technology (IST)
Capacity Building
03 Capacity Building

1. ICG Information Centre: RCSSTEAP (China)

The 4th meeting of the Governing Board and the 5th Anniversary Celebration of RCSSTEAP (China) (Dec. 9, 2019)
03 Capacity Building

2. Alliance of Regional Centres (ARC)

Meeting of the Directors of the UN-Regional Centres

(Dec. 10, 2019)
Capacity Building

3. Online Lectures

Online Lectures on the Frontiers of Space Technology Applications

<table>
<thead>
<tr>
<th>No.</th>
<th>Course Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>International Cooperation on Space Policy and Space Law-origin, development and future direction</td>
<td>Nov. 23-Dec. 14, 2020</td>
</tr>
<tr>
<td>2</td>
<td>Writing a Research Paper</td>
<td>April 14, 2021</td>
</tr>
<tr>
<td>3</td>
<td>The Space-time References of Beidou System</td>
<td>April 15, 2021</td>
</tr>
<tr>
<td>4</td>
<td>GNSS Reflections and Its Applications</td>
<td>May 13, 2021</td>
</tr>
<tr>
<td>5</td>
<td>Beidou High Precision Positioning: Progress and Application</td>
<td>May 20, 2021</td>
</tr>
</tbody>
</table>
Capacity Building

4. Experimental equipment

- GNSS Simulator
- RTK Antenna
- GNSS Signal Collector
- SLAM Platform
- UAV System
Capacity Building

5. Publications
Progress in COVID-19
04 Progress in COVID-19

1. Enrolment & Graduation

Video Interview

Online + Offline Defense
04 Progress in COVID-19

2. Management & Services

✓ Health Daily Report
✓ Open Ceremony
✓ Regular class meetings

✓ Free masks providing
✓ Online outpatient appointments
✓ Online psychological counseling
✓ Door-to-door photo collection
Progress in COVID-19

3. Online Teaching Scheme

- Live broadcasting online
- Video recording
- MOOC
- WeChat/learning materials

<table>
<thead>
<tr>
<th>No.</th>
<th>Course</th>
<th>Hours</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Satellite Navigation Data Processing</td>
<td>32</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>GNSS Applications</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>GNSS New Technologies</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>GNSS Receiver Principles and Design</td>
<td>32</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>GNSS/INS Integration Navigation</td>
<td>16</td>
<td>1</td>
</tr>
</tbody>
</table>
Progress in COVID-19

4. Online activities

- Long-Distance Book Club
- A Food Trip Around the World
- Studying at Beihang - Days of Fighting the Epidemic
Thank you

http://en.beidou.gov.cn