KOICA-HGU
Master's Degree Program in
Techno-Entrepreneurship Competency
Based on EE&ICT Convergence

August 4, 2020 – December 31, 2021

Pohang & Seongnam, Republic of Korea

KOICA CIAT
KOICA Fellowship Program

Korea International Cooperation Agency

HANDONG GLOBAL UNIVERSITY

Handong Global University

Participants are strongly advised to thoroughly read and follow the provided instructions in the Program Information.

Contents

Ⅰ. PROGRAM OVERVIEW

◨ **Program Title: Master's Degree Program in Techno-Entrepreneurship**
              Competency Based on EE & ICT Convergence

◨ **Duration**
   - Stay duration: August 4, 2020 - December 31, 2021 (17 months of study in Korea including 2 weeks of pre-course)
     <u>During the 17 months in HGU, students are strongly recommended to complete their thesis.</u>

◨ **Degree: Master of Science in ICT convergence**

◨ **Program Background**

  - The economic development model based on cheap labor has failed to lift developing countries from poverty or build their capacity in this digital information era. If the status quo were to prevail, the gap between developed countries and developing countries will only widen.

  - EE and ICT convergence, which formed the basis for the fourth industrial revolution, provides opportunities for entrepreneurship and innovation, which could allow developing countries to make a quantum leap.

  - The need to create more jobs and opportunities for growth through education and practical training in EE and ICT convergence is growing.

◨ **Objectives**

  - To train government and NGO officials from developing countries in the field of EE and ICT convergence to foster greater entrepreneurship and capacity building.

  - To train domestic leaders in the field of EE and ICT convergence in a systematic and practical manner so that they can create policies and attract capital investments to their country

  - To develop government officials' problem-solving skills through a training in the field of EE and ICT convergence

  - To share Korea's experience in the field of electrical engineering and ICT convergence and its industries as well as to raise mutual understanding between two countries

◾ **Goals**

- To nurture experts in the field of EE and ICT convergence so that they can lead economic development in their counties through the understanding of South Korea's EE and ICT convergence model for mutual benefits of two countries

- To build up networks of industry experts and investors so that they can forge an effective partnership and support technological and economic growth between two countries

◾ **Training institute**

Graduate School of Global Development and Entrepreneurship,
Handong Global University (hereinafter referred to as HGU)

◾ **Number of participants: 15 government officials**

◾ **Language: English fluency that requires no translation**

KOICA-HGU students are required to earn credits for all specialized courses in English and write their graduation theses (academic papers) in English.

◾ **Accommodations ****

- KOICA: International Cooperation Center (hereinafter referred to as ICC)

- HGU: Dormitory (Creation Hall) *

(*) Living conditions of dormitory (Creation Hall)

- Single occupancy

- A room includes a private bed, a desk, a bookshelf and a closet.

- A communal area includes a lounge, a laundry room, a bathroom and a kitchen.

(**) Accommodation is subject to change according to circumstances.

Ⅱ. PROGRAM CONTENTS

1. ACADEMIC SCHEDULE

Session	Date (YYYY.MM.DD)	Contents / Remarks
Preparatory session	2020.8.4 - 2020.8.7	Arrival, medical check-up, KOICA orientation
	2020.8.7	Arrival at HGU
Pre-course	2020.8.10 - 2020.8.10	HGU orientation
	2020.8.10	Entrance Ceremony
1st semester course registration	2020.8.24 - 2020.8.31	1 week
1st semester (Fall semester)	2020.8.31 - 2020.12.18	16 weeks
Canaan Farmhand School	2020.8.31 - 2020.9.4	1 week
Field practicum I	2020.10.21 - 2020.10.23	3 days
Winter break	2020.12.21 - 2021.1.15	4 weeks
2nd semester course registration	2021.1.11 - 2021.1.15	1 week
2nd semester (Winter semester)	2021.1.18 - 2021.2.26	6 weeks
3rd semester course registration	2021.2.22 - 2021.2.28	1 week
3rd semester (Spring semester)	2021.3.02 - 2021.6.11	15 weeks
Assigning academic advisor	2021.3.22 - 2021.4.16	4 weeks
Field practicum III	2021.4.3 - 2021.4.6	4 days
Spring break	2021.6.11 – 2021.6.20	1 week
4th semester course registration	2021.6.14 - 2021.6.20	1 week
4th semester (Summer semester)	2021.6.21 - 2021.7.30	6 weeks
Summer break	2021.8.2 - 2021.8.29	4 weeks
5th semester course registration	2021.8.23 - 2021.8.30	1 week
5th semester (Fall semester)	2021.8.30 - 2021.12.10	15 weeks
Thesis submission (draft)	2021.9.28 - 2021.10.9	2 weeks (4 - 5th week of 5th semester)
Thesis examination	2021.11.1 - 2021.11.5	1 week
Thesis submission (final)	2021.11.19.	12th week of 5th semester
Winter break and wrap up	2021.12.13 - 2021.12.24	2 weeks
Graduation ceremony	2021.12.17.	-
Departure	2021.12.31.	In 2 weeks after the graduation ceremony

* The schedule above is subject to change.

** More detailed Academic Schedule will be provided upon arrival.

2. CURRICULUM

1) Curriculum & credits based on courses (subject to change)

The total number of credits required to complete the master's program: 36 credits

Classification (credits)	Type	Course Title
Pre-course (1)	Required (1)	• Preliminary course (1) - Computers & quantitative methods - Research basic & academic writing
Foundation courses (6)	Required (0)	• Korean I (0) • Korean history & culture (0)
	Electives (6)	• Korean II (0) • Cognitive psychology (3) • Business, culture and spirituality (3)
EE & ICT convergence (27)	Required (9)	• Programming practice (3) • Technology and ICT convergence market (3) • Economic development of Korea and EE&ICT (3)
	Electives (18)	• Mobile programming (3) • Introduction to machine learning (3) • Introduction to VR (Virtual Reality) (3) • IoT (Internet of Things) design and practice (3) • Big data analytics (3) • ICT intensive course (3)
Startup development course (18)	Required (3)	• Venture entrepreneurship and ICT startup strategy (3) • Field practicum I (0) • Field practicum II (0) • Field practicum III (0)
	Electives (15)	• Smart City (3) • Analyzing & interpreting of financial statement (3) • Startup incubating methodology (3) • Startup intensive course (3) • Internship (0)
Research and policy (18)	Required (12)	• ICT convergence policy project I (3) • Research methodology (3) • Thesis basic (3) • Thesis research (3)
	Elective (6)	• Technology policy I (3) • ICT convergence policy project II (3)

2) Curriculum & credits based on semester

As shown in the table below, students must complete 36 credits to graduate (excluding a thesis course).

Semester (credits)	Type	Course title
Pre-course (1)	Required (1)	• Preliminary course (1)
1st semester (21)	Required (15)	• Programming practice (3) • Venture entrepreneurship and ICT startup strategy (3) • Field practicum I (0) • Research methodology (3) • Economic development of Korea and EE&ICT (3) • Technology and ICT convergence market (3)
	Electives (6)	• Mobile programming (3) • Introduction to machine learning (3)
2nd semester (3)	Required (3)	• Korean I (0) • Korean history & culture (0) • Field Practicum II (0) • Technology policy (3)
3rd semester (24)	Required (6)	• Field practicum III (0) • Thesis basic (3) • ICT convergence policy project I (3)
	Electives (18)	• Introduction to VR (Virtual Reality) (3) • IoT (Internet of Things) design and practice (3) • Big data analytics (3) • Analyzing & interpreting of financial statement (3) • Startup incubating methodology (3) • ICT intensive course (3)
4th semester (6)	Required (3)	• ICT convergence policy project II (3)
	Elective (3)	• Korean II (0) • Smart City (3) • Internship (0)
5th semester (12)	Required (3)	• Thesis research (3)
	Electives (9)	• Cognitive psychology (3) • Business, culture and spirituality (3) • Stratup intensive course (3)

* The curriculum above is subject to change.

3. EXTRACURRICULAR ACTIVITIES (TENTATIVE)

1) Field practicum 1 - 3

A field practicum is designed to learn and experience ICT convergence technology applications in existing industrial sites to catch up with the fourth industrial revolution. Students will visit several major ICT companies including some promising startups in Korea.

Visiting Sites:

- Samsung SIM & Google Korea
- Hyundai Motors & Korea national Oil Cooperation
- LG Electronics, Naver Corporation, POSCO and POSCO ICT
- Creative Economy and Innovation Center, etc. (Such as smart farm, smart factory)
* The sites are subject to change due to circumstances.

2) Fellowship event

- Welcome party
- Monthly meeting with faculty members
- Monthly birthday party, etc.
* Events are subject to change.

3) International Buddy System (IBS)

IBS is a program hosted by the Handong Student Government to provide better opportunities for international students and Korean students to get to know with each other and learn different cultures. An international student who applies for the IBS will be paired with a Korean student to participate in a variety of events.

4) Korean cultural experience program

Office of International Affairs (OIA) hosts events where international students can experience the Korean culture. The OIA will offer a variety of cultural programs so that international students can familiarize themselves with the Korean culture.

Activities (experience)

- Korean traditional paper folk craft and pottery making
- Korean traditional drawing and food cooking
- Visiting Gyeongju National Museum & Korean
  Traditional Houses, etc.

 * The activities are subject to change.

5) Culture night

International students regularly organize a culture night event to share their cultures with Korean students (cultural performances, global food fair and more).

Ⅲ. TRAINING INSTITUTE

1. GENERAL INFORMATION

1) Introduction of Handong Global University and Graduate School of Global Development and Entrepreneurship

Handong Global University (HGU) was founded in 1995 and it is located in the rolling hills of the eastern coast of Pohang, Korea. Perched atop a hill, covering over 200 acres, the campus looks out over both the East Sea, and the western Pacific Ocean with a small lake bordering the east side of the campus.

Since its foundation, HGU has been promoting the globalization of education and its campus under the slogan "Why not change the world?". Our vision is to show love towards our neighbors and to change the world by maximizing both students' and professors' talents. HGU has uniquely contributed to the advancement of undergraduate education by creatively using global human resources for a holistic education that develops both character and knowledge. In addition, HGU has been drawing attention with its innovative educational curriculum that advances the 21st century's requirement of learning and problem - solving in a globalized era.

Competency is strengthened not with knowledge-delivery education styles or teaching by rote memorization but with practical education that guides students in solving problems. HGU helps students build their competencies through project-based courses and nurtures well-balanced talents that play an important role in the world.

2) Website

Handong Global University: http://www.handong.edu

Graduate School of Global Development and Entrepreneurship:
http://hdggde.handong.edu/

3) History of Handong Global University

Year	Contents
2017	A ground-breaking ceremony of Ban Ki-moon Global Education Institute in support of the United Nations Academic Impact held
	HGU designated as the target of the 'Software Hub University Project' by the Ministry of Science, ICT and Future Planning
2016	HGU received the 'University Institution Assessment Certification' in the 2nd Cycle
	HGU co-hosted the 3rd UNAI Seoul Forum
	Ministry of Science, ICT and Future Planning selected HGU for the Big Data Pilot Project
	HGU designated in PRIME (PRogram for Industrial needs-Matched Education)
2014	Dag Hammarskjöld Library designated HGU Library as UN Depository Library
2012	Graduate School of Global Development & Entrepreneurship opened
2010	Designated as the UNAI Global Hub University
2009	Became a member of United Nations Academic Impact
2008	Selected as the 'University Innovation' by Ministry of Education
1997	Joined the Institute of International Education GEEE
1994	Foundation of HGU

2. ACCOMMODATION

Students of the Graduate School of Global Development & Entrepreneurship KOICA program must live in the dormitory of Creation Hall in Handong Global University.

Living Conditions
- Single occupancy
- A room includes a private bed, a desk, a bookshelf and a closet.
- A communal (shared) area includes a lounge, a laundry room, a bathroom and a kitchen.

3. OTHER INFORMATION

1) Lecture rooms

KOICA Lecture Room 1 (All Nations Hall 414)
Most of the KOICA Couse lectures are held in the ANH 414.

KOICA Lecture Room 2 (All Nations Hall 401)

2) Seminar room

HGD&E Seminar Room (Newton Hall 411)
Various seminars related to EE & ICT Convergence Startup are held in the seminar room and this is where students of HGD & E study.

3) Dining in campus

Shinsegae Food, the Student Cafeteria

(on the 1st floor of Student Union Hall)

- Price: 3,000 to 4,500 KRW
- Fixed menu among various kinds
- Offers bagels, pretzels, sandwiches, cakes
  as well as various drink options

Mom's Kitchen

(on the 1st floor of Student Union Hall: library side)

- Price: 3,500 KRW
- Sells drinks, smoothies and different types of cakes
- Fixed menu between Western and Korean
- Take out menu: gimbap, sandwich

Handong Lounge

(on the 3rd floor of Hayongjo Hall)

- Price: 4,000 to 9,000 KRW
- Meals are served from 11:00 to 19:30.

Burger King

(on the 2nd floor of Hayongjo Hall)

- One of the world's largest QSRs
  (Quick Service Restaurant)

- Sells hamburger, french fries, beverage, etc.

4) Convenience facility

Convenience Store (on the B1 floor of Bethel Hall)

- Assortment of daily necessities, textbooks and office
  supplies

GS 25: Convenience Store

(on the 1st floor of Hayongjo Hall)

- Operating hours: from 08:00 to 01:00

Alpha Store & Book Store

(on the 1st floor of Hayongjo Hall)

- Operating hours: from 09:00 to 21:00

- Sells stationery, textbooks & general books

5) Café

Question Mark Café

(on the 2nd floor of Student Union Hall, dormitory side)
- Provides a place to study and meet

Hisbeans Café (on the 3rd floor of Oseck Hall)

- Sells a variety of hot and cold beverages, waffles, etc.

EDIYA Coffee (on the 1st floor of Hayongjo Hall)
- Sells a variety of hot and cold beverages and dessert

6) Library

Library (located next to the Newton Hall)
- 1st floor: Computer lab, Reference library,
  Visual Media room
- 2nd floor: Library Lounge, Reading room
- 3rd floor: Group study room (Sang-sang lap),
  Reading room

Computer Labs

- Numerous computer labs open to students at these locations
- On the 1st (scanner installed) and 3rd floor of Oseck Hall and on the 4th floor of Hyundong Hall

Cloud-printing service

Most computer labs and dorms offer cloud-printing service that is available for use with a student card. In addition, a printing shop is located on the 2nd floor of Student Union Hall.

7) Other facilities

Student sport facilities

- A soccer and futsal field, a basketball court, a tennis court, a pool table, and a fitness center

Prayer rooms

- Hyundong Hall on the 2nd and 4th floor, Oseok Hall on the 4th floor, and in each dormitory

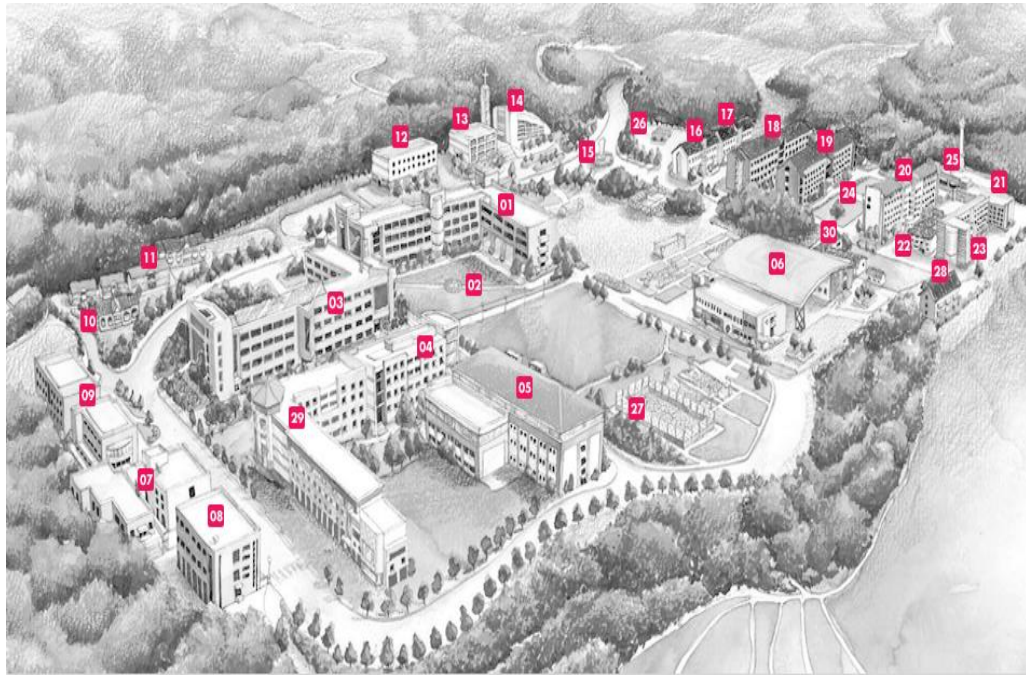**Post office** (Hyundong Hall Basement Vision Square side)

- Office Hour: 9:00 am ~ 6:00 pm/ 12:00 pm ~ 1:00 pm Lunch break
- Closed Saturdays and Sundays

Boaz medical (Hayongjo Hall on the 3rd floor)

- Business Hour: 14:00 ~ 18:00 (reception deadline 17:40)

8) Campus map

01 Hyundong Hall	07 Handong Techno Business Incubator	13 Hyoam Anex Hall	19 Creation Hall	25 Power Plant
02 Vision Square	08 Global Green Development Center	14 Hyoam Chaplain	20 Lothem Hall	26 Bus Stop
03 Nehemiah Hall	09 Handong International School	15 HGU Stone	21 International Hall	27 Hiddink Dream Field
04 Newton Hall	10 HIS Dormitory	16 Shalom Hall	22 Global House	28 Nicodemus House
05 Oseok Hall	11 Onnuri House	17 Evenezel Hall	23 Grace Hall	29 All Nations Hall
06 Student Union Hall	12 Global Language Center	18 Vision Hall	24 HD Square	30 Convinience Store (HGU Shop & Book Sore)

9) Medical facilities in Pohang city

Type	Medical facility	Location	Business hour	Landmark	Phone no.
General	Sunlin Hospital	Daeshin-dong, Buk-gu	**Weekday**: 9:00~17:00 **Lunch** : 13:00~14:00 **Saturday**:9:00~12:00	Lotte Department Store	054-245-5000
	Zone Medical	Duho-dong, Buk-gu	Different for each department	GS Mart	054-230-7600 054-260-7500
Orthopedics	Medical Doctors	Yangdeok-dong, Buk-gu	**Weekday**: 9:00~19:00 **Lunch**: 13:00~14:00 **Saturday**: 9:00~14:00	Opposite of NH Hanaro Club	054-232-2390
Internal Medicine	Socksiwon Internal Medicine	Yangdeok-dong, Buk-gu	**Weekday**: 8:00~18:00 **Lunch**: 13:00~14:00 **Saturday**: 8:00~12:00	Opposite of NH Hanaro Club	054-232-0510
	Sock Internal Medicine	Yangdeok-dong, Buk-gu	**Weekday**: 9:00~19:00 **Lunch**: 12:30~14:00 **Saturda**y: 9:00~15:00	Dream Mart	054-247-1166

Type	Medical facility	Location	Business hour	Landmark	Phone no.
Otolaryngo-logy	Yangduk Hana Otolaryngology	Yangdeok-dong, Buk-gu	**Weekday**: 9:00~19:00 **Saturday**: 9:00~16:00	Hana Bank 2nd floor	054-255-1000
	Hyundai Otolaryngology	Duho-dong, Buk-gu	**Weekday**:9:00~19:00 **Saturday**:9:00~16:00 **(Sun/Holiday)** 9:00~13:00	Across the street from Mission Clinic	054-231-7582
Dental	Yanduk Bubu Dental Clinic	Yangdeok-dong, Buk-gu	**Weekday**: 9:30~18:30 **Sat**: 9:30~14:00	Woori Bank	054-262-2875
	Goreni joyful Dental Clinic	Yangdeok-dong, Buk-gu	**Weekday**: 9:30~17:30 **Lunch**: 13:00~14:00 **Saturday**: 9:30~12:00	Opposite of NH Hanaro Club	054-244-7528
Dermatology	Medical Doctors	Yangdeok-dong, Buk-gu	**Weekday**: 9:30~17:00 **Tue/ Fri** : 9:30~20:30 **Lunch**: 13:00~14:00 **Saturday**: 9:30~16:00	Opposite of NH Hanaro Club	054-231-5600
	N Skin Plastic	Yangdeok-dong, Buk-gu	**Weekday**: 10:00~19:00 **Fri**: 10:00~21:00 **Sat**: 10:00~15:00 **Saturday**: 9:30~12:00	Woori Bank	054-255-5800
Ophthal-mology	Good Doctors M Eye Center	YangDeok-dong, Buk-gu	**Weekday:** 9:00~18:00 **Saturday:** 9:00~14:00	NH Hanaro Club	054-256-0007

- 119 Fire & Emergency services

The 119 Emergency & SOS service is similar to the American 911 service. In case of fire or a medical emergency, call this number. The service will immediately send a fire truck or an ambulance to the required location.

Ⅳ. ACADEMIC REGULATIONS

1. ACADEMIC REGULATIONS

1) Attendance policy

Students are expected to attend all of the classes he / she has registered for each semester. Any student must attend the classes at least three-fourths of the total class hours.

In the event that a student is absent for any of the reasons below, the student must notify the appropriate department, faculty, and dean and get approval in advance.

- Death of an immediate family member (grandparents, parents, siblings) or equivalent circumstance
- Academic planning, field-trips, on-location training, etc.
- Participation in seminars or conferences (including international ones) as approved by the Graduate School Dean
- Other events as approved by the Graduate School Dean

In the event of illness or emergency situations, students who will be absent for less than seven days (including holidays and weekend days) need to submit a written notification of such absence to the Graduate School Dean. For absences longer than seven days, students must submit a written diagnosis by a physician.

2) Examinations and evaluation

- Minimum Grade Point Average Requirement

    Students must maintain a minimum a B0 (80-84) grade point average.

    Lower point than 80 (B) will not be acknowledged as a passing grade.
- Exams
    - Regular Exams: Mid-term (7th – 8th week of semester),

                     Final (last two weeks of semester)
    - Make-up Exams: In the event a student cannot sit for an exam due to military service, illness, or any other emergency, the student must notify the faculty before the exam date, and obtain the Graduate School Dean's approval to sit for the exam at another time.

- Qualifications to sit for an exam

Any student who, without good reason, has failed to attend class for at least three-fourths of the total classes shall be prohibited from sitting for the exam. In the event of illness or emergencies, students need to provide a written explanation of their absence.

- Scholastic performance evaluation method

Scholastic performance is based on a 100-point scale for each course registered. Grade is based on classroom performance (presentations, attendance) and test performance (mid-term and final exams).

- Evaluation standard

Grade	Score	Grade point	Grade	Score	Grade point
A+	95 - 100	4.5	P	80 - 100	Pass
A0	90 - 94	4.0	I		Incomplete
B+	85 - 89	3.5			
B0	80 – 84	3.0			
F	79 – 0	0			

- Graduation requirements

In order to graduate, students must take 36 credits and earn a grade point average (GPA) higher than 3.0. In addition, students must submit a thesis in English during the thesis research course.

2. RESIDENCE REGULATIONS

- Students must reside in a dormitory.
- Living off-campus is not allowed.
- A student who violates residency regulations will be evicted from the dormitory and he/she must return to his/her country immediately.

Ⅴ. REQUIRED DOCUMENTS

All documents should be sent to the regional KOICA office or the relevant government office.

1. REQUIRED BY KOICA

KOICA Application Form for the KOICA Fellowship Program

2. REQUIRED BY HGU

1) HGU Application Checklist
2) HGU Agreement on Collection/Use of Personal Information
3) HGU Application for Admission
4) HGU Self-Introduction / Study & Research Plan
5) Two recommendations for University Admission filled out by professors and/or currently working employers (Sealed and signed by recommenders)

   * All documents should be typed in English. Handwriting is not acceptable.

   ** Forms required by HGU have been attached.

3. REQUIRED OFFICIAL DOCUMENTS

1) Verification of Academic Transcript (all semesters)
2) Notarized certificate of a Bachelor's Degree
3) Copy of applicant's passport

   * Passport must be valid at least 3 months more than the completion date of program (Completion date : Dec. 2021).

4) Official document indicating parent-child relationship between the applicant and parents (Ex: Applicant's Birth Certificate or Household Register proving the parent-child relationship)
5) Doctor's opinion paper about health checkup review
6) Certificate of Employment (if applicable)
7) Certificate proving English Proficiency(if applicable): Please submit a score report of a recognized English Proficiency Test such as TOEFL, TEPS, IELTS or any other supporting documents which demonstrate appropriate English language proficiency.

4. IMPORTANT NOTES (FOR APPLICANTS)

All forms should be **typed in English** and all the supporting documents should be **in English.** Documents in any other language should be accompanied by a notarized English translation.

Original documents should be submitted. (If they are unavailable, the institution must authorize copies before they are submitted.)

If any of the submitted materials contain false information, admission will be rescinded.

Applicants whose forms and supporting documents are incomplete or unsatisfactory will be disqualified from the admission process.

Applicants should take full responsibility for any disadvantage due to the mistakes or omissions on the application.

VI. CONTACTS

1. CONTACT INFORMATION

[KOICA]

Korea International Cooperation Agency (KOICA)

· Program Manager: Ms. Min-ji Kim
  · ODA Education Center
  · Address: KOICA, 825 Daewangpangyo-ro, Sujeong-gu, Seongnam-Si, 461-833 Gyeonggi-do,
       Republic of Korea
· Tel: +82-31-740-0679
· E-mail: kmj@koica.go.kr   / · Homepage: http://www.koica.go.kr

· Program Coordinator: Ms. Min-kyoung Kim
  · Tel: +82-31-777-2841
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[Handong Campus]

Graduate school of Global Development & Entrepreneurship

· Prof. in Charge: Mr. Yun Seon Kim
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Staff of HGD&E

· Coordinator: Ms. Yeong a Kim (Jamie Kim)
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       Univ., 558 Handong-ro, Hunghae-eup, Buk-ku, Pohang-City, Gyeongbuk, 791-708, Korea
  · Tel: +82-54-260-1668 / · E-mail: Jamiekim@handong.edu

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*The schedule and information in PI (Program Information) is subject to change according to the KOICA and Handong Global University schedule and stuation. Students should refer the newest document for schedule.