
2025 K-Global Korea Scholarship

Application Guidelines for Graduate Degrees

2025. 2.



Gyeongsangbuk-do
Division of Alien Communities

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1. Program objectives

- There is a serious shortage of human resources in the region due to population decline and concentration in the metropolitan area. In particular, there is a shortage of talented people to lead the region's major high-tech industries.
- By providing foreign students with the opportunity to study at higher educational institutions in Gyeongsangbuk-do, we create an environment in which outstanding foreign talent can work and reside in the province.

2. Programs and Universities

Degree Programs

Program	Master's Degree	Doctoral Degree
Period of Scholarship	One year of Korean language program + Two years of degree program	One year of Korean language program + Three years of degree program

※ Admission to degree programs without a Korean language training course available

Program Quota : 50*

* It may be adjusted in consideration of the budget situation and the number of people recruited by university

Available fields of study and Universities

- **Available Field of Study**
 - Science and engineering fields and regionally specialized industrial fields of study established by the participating universities.
 - Academic programs offered during evenings (night school), short-term programs, online and distant-learning programs are not applicable in this scholarship program.

- **Available Universities**

- University selected as K-GKS Universities

— < After the scholarship period ends > —

- K-GKS scholarship students are obligated to either apply to local companies or pursue higher degrees (e.g., Master’s students can advance to doctoral programs) at universities located in Gyeongsangbuk-do and to maintain residency in Gyeongsangbuk-do for three years following graduation. ※ Form 5 is required to submit

3. Eligibility

Eligibility

- **Nationality**

- Applicants' parents (or legal guardians) must hold citizenship from another country other than Korea. If applicants or their parent hold dual citizenship (one who has both Korean citizenship and citizenship of another country), such applicant is NOT eligible to apply
- Applicants and their parents who had previously held Korean citizenship must submit documentation issued by the Korean government that proves their renunciation of Korean citizenship.
- If an applicant's citizenship is changed during the selection process, he or she will be excluded from the evaluation.

- **Level of Education**

	Program	Minimum Level of Education	Notes
Degree	Master’s	Bachelor’s Degree	
	Doctoral	Master’s Degree	

※ Applicants must have obtained the required degree (minimum level of education indicated above) by February 28, 2025.

○ **Grades**

- Cumulative Grade Point Average (CGPA) of the entire curriculum from the previous degree program* must meet one of the conditions below;

* Previous degree for a Doctoral degree program applicant is a Master's degree program.

- ① Score percentile should be 80% or above on a 100-point scale or be ranked in the top 20% of one's class.
- ② CGPA* must be equal to or above 2.64/4.0, 2.80/4.3, 2.91/4.5 or 3.23/5.0
 - * CGPA : Cumulative Grade Point Average, Overall average score
- ③ For universities ranked within the top 300 in the '2025 QS World University rankings', grade conditions are exempted.

· Applicants must submit an academic transcript with CGPA or ranking information
· If a transcript does not provide CGPA in any one of the accepted GPA scales (4.0, 4.3, 4.5, 5.0 or 100 point scale), then the applicant must submit a transcript converted into one of the above GPA scales as a supplementary document.

○ **Age**

- Must be under 40 years of age (born after September 1, 1985)

○ **Health**

- All applicants must be in good health, both mentally and physically, to study in Korea for the full duration of the program.

Restriction

- A person who has graduated (or is expected to graduate) from Korean high school (including international schools) or a Korean university* is NOT eligible to apply.

* In accordance with Article 29 of the Higher Education Act, both undergraduate and graduate programs are included.

- A person who has graduated from an online curriculum from a Korean high school or a Korean university cannot apply.
- A person who is currently in his/her final year at a Korean university cannot apply.

- A person who has previously received scholarship for a degree program from the Korean government is NOT eligible to apply.
 - A person who had previously enrolled at a degree program through a Korean government sponsored scholarship program cannot apply.
 - A previous GKS, K-GKS scholar* whose scholarship was cancelled after their enrollment. * Included 1 year of Korean language program
 - A former GKS, K-GKS scholar who had enrolled in a degree program

- 'Cancellation of Scholarship' means a GKS, K-GKS scholar either withdrew from the program or his/her scholarship was forfeited due to cumulative warnings, etc. during their scholarship period.
- A previous GKS scholar who had received scholarships from GKS Non-degree program for exchange students and IRTS Korean language program can apply.

- Final successful candidates of the GKS, K-GKS degree program from the past three years who have withdrawn from the program or was disqualified from the program prior to enrollment cannot apply.
- In case of duplicate application through two or more universities.

- Applicants must apply to one university and one department, duplicate submissions will be disregarded in the evaluation. If found afterwards, scholarship will be cancelled even after the evaluation is completed.

4. Documents to Submit

List of documents to submit

Type	Application Documents	Master's	Doctoral
Documents to Complete (Required 1~7, Optional 8)	(Form 1) Application Form	○	○
	(Form 2) Personal Statement	○	○
	(Form 3) Study Plan	○	○
	(Form 4) ONE Letter of Recommendation	○	○
	(Form 5) K-GKS Applicant Agreement	○	○
	(Form 6) Personal Medical Assessment	○	○
	(Form 7) Consent to Collect and Use Personal Information	○	○
	(Form 8) Korean Language Program Exemption Application	Optional	Optional
Certificates (Required) (Must be Apostilled or Consular confirmed)	Applicant's/Parent(s)' Proof of Citizenship and family relationship Document	○	○
	Bachelor's Graduation Certificate (or Diploma)	○	○
	Bachelor's Degree Transcript	○	○
	Master's Graduation Certificate (or Diploma)		○
	Master's Degree Transcript		○
	Proof of Korean Citizenship Renunciation Document - applicant and his/her parent(s)	Optional	Optional
	Proof of Korean War Veteran's Descendant	Optional	Optional
Other documents (Optional)	Score report of valid TOPIK (original) or English Proficiency Test (copy)	Optional	Optional
	Awards and other certificates, etc. (copy)	Optional	Optional
	Applicant's Passport (copy)	Optional	Optional

※ Other documents required by the university should be submitted.

Documentation Requirements

○ Documents to complete (Form 1 ~ 8)

- All forms must be filled in English or Korean with applicant's original handwritten signature

※ No need to be apostilled or consular confirmed

- Documents to submit: ONE set of original documents

- **Documents required by the university**
 - Details should be checked on the website of the screening agency (university)
- **Required certificates**
 - Documents written in English or Korean: must be apostilled or consular confirmed
 - Documents written in other languages
 - ① Documents written in a language other than English or Korean must be submitted together with a certified translation.
 - ② Obtain apostille or consular confirmation on either original document or certified translation.
 - ※ If your country belongs to one of the member countries for the Apostille Convention, submit your 'required certificates' with apostille.
 - Number of documents to submit: ONE set of apostilled/consular confirmed documents
- **Things to note when submitting application documents**
 - All documents must be submitted in English or Korean.
 - For certificates that cannot be reissued, keep the original, get a copy notarized, and submit the copy with Apostille confirmation (or consular confirmation).
 - If the applicant does not submit the required documents or omits the signature required for each form, the applicant can be excluded from the second round selection.
 - All submitted documents and records will not be returned(kept for more than five years).
 - If there are documents (portfolio, etc.) separately required by the university other than the list of documents requested by Gyeongsangbuk-do, the applicant shall submit them directly to the university.
 - The letter of recommendation must be signed and sealed by one recommender

who can evaluate the applicant's academic abilities. This letter should be sent directly to the first round of selection (embassy or university).

※ Examples of recommenders include a supervising professor, department head, etc.

○ **Documents to be Submitted for Evaluation**

Documents to Submit	Submission Requirement
<p>Proof of Citizenship and Family relationship</p>	<ul style="list-style-type: none"> - Official certificates such as birth certificate or family register issued by a government that proves ① family relationship between an applicant and his/her parents and ② their citizenship <ul style="list-style-type: none"> • If one cannot submit necessary documents due to an absence of their parent(s) – e.g., divorced or deceased – please provide additional documents (e.g., divorce certificate or death certificate) that explains the reason for not submitting their proof of citizenship ※ Chinese applicants must submit a household register or a certificate of kinship. If the document is in Chinese, it must be apostilled and accompanied by a certified translation. - If applicants’ or their parents’ citizenship information is not indicated in the above documents, then submit valid passport copies (do not need to be apostilled or consular confirmed) as supplementary documents <ul style="list-style-type: none"> • Ethnic group, birth place, or current residency in the submitted documents are not accepted as a citizenship information • If passport is not available, please submit other government issued document (need to be apostilled or consular confirmed) or a copy of an ID card that clearly indicates citizenship information (does not need to be apostilled or consular confirmed) as supplementary document ※ If supplementary documents submitted in addition to a birth certificate or a family register are not reliable, such application may be put at a disadvantage during evaluation
<p>Certificate of Graduation</p>	<ul style="list-style-type: none"> - Submit a graduation certificate, degree certificate or a diploma that indicates the date of graduation (or degree acquisition date). The graduation date must be prior to February 28, 2025 - Provisional graduation certificate or provisional degree certificate will not be accepted as a graduation certificate - Must submit a certificate officially issued by the university of previous degree program

<p>Academic Transcript</p>	<ul style="list-style-type: none"> - Submit an academic transcript officially issued by the graduated university - If the CGPA is not indicated in one of the acknowledged GPA scales (4.0, 4.3, 4.5, 5.0 or 100 point scale), submit a transcript converted into one of the above GPA scales as a supplementary document <ul style="list-style-type: none"> • A converted transcript is only valid when the relevant university officially confirmed the document (this supplementary document does not need to be apostilled or consular confirmed, but should be submitted in an original document with university's authentication) • A transcript converted with a conversion tool such as scholaro.com or wes.org is only acceptable when the relevant university officially confirms the document (does not need to be apostilled or consular confirmed, but should be authenticated by the university) ※ Application without converted transcript may be put at a disadvantage during evaluation - Transcript indicated with a CGPA for the entire academic curriculum will be accepted even if it does not have GPA per semester/year <ul style="list-style-type: none"> • In such case, please put CGPA only and leave the GPA section empty in the application form ※ Academic transcript without a CGPA or without ranking information may be put at a disadvantage during evaluation - If a transcript of a transferred student that does not include the grades of the previous semester(s), submit an academic record of the previous university as a supplementary document (need to be apostilled or consular confirmed)
<p>Letter of Recommendation</p>	<ul style="list-style-type: none"> - The recommendation should come from professors, department heads, or other relevant individuals at the applicant's university. (The recommendation letter should be dated within one year of the application deadline.)
<p>Proof of Korean Citizenship Renunciation</p>	<ul style="list-style-type: none"> - Submit supporting document issued by the Korean government that indicates details on the definite loss of Korean citizenship and its date. An application or a receipt for renunciation of Korean citizenship is not accepted

<p>Proof of Korean War Veteran's Descendant</p>	<ul style="list-style-type: none"> - Certificate that are officially issued by the government that certifies the lineal ascendant of an applicant was a veteran who participated in the Korean War as a foreign military. - Submit supporting documents such as family register or birth certificate that proves family relationship between an applicant and his/her lineal ascendant
<p>Score Report of Korean or English Proficiency Test</p>	<ul style="list-style-type: none"> - Submit if necessary (optional) - Submit an original printed copy of TOPIK and English score report from the official website (topik.go.kr) - Korean: above TOPIK level 3 <ul style="list-style-type: none"> • TOPIK certificates from the 87th to the 98th exam will be recognized as valid certificates - English: TOEIC 750, TOEFL PBT 550, TOEFL iBT 79, new TEPS 327, IELTS 6.0 or higher (the expiration date of the certificate must be February 28, 2025 or later) <ul style="list-style-type: none"> ※ Only accepted with valid expiry date required by the university. ※ Applicants who have graduated from a university in Australia, Canada, Ireland, New Zealand, Great Britain, or the United States are exempted from the English Proficiency Test.
<p>Other Materials</p>	<ul style="list-style-type: none"> - Submit if necessary (optional) - Submit materials such as an award that can prove the applicant's activities described in the personal statement and study plan. Submit in photocopied documents. (Do not need to be apostilled or consular confirmed)
<p>Passport (Copy)</p>	<ul style="list-style-type: none"> - Submit if necessary (optional) - Submit a passport copy as a supplementary document if the proof of citizenship (family register, birth certificate, etc.) does not clearly indicate citizenship information

**< Items to Note on Apostille
(or Consular Confirmation) >**

- Required Certificates (refer to 'List of Documents to Submit' section) must be apostilled (or consular confirmed)
- If your document is unable to be re-issued, please keep the original and obtain an apostille (or consular confirmation) on a notarized copy
- Simple photocopies or notarized copies of the apostilled (or consular confirmed) documents are NOT accepted. However, a certified true copy issued by a Korean embassy or a certified true copy issued by a government agency that initially issued the original apostille document are accepted
 - ※ If the document cannot be apostilled or consular confirmed (e.g., because the type of document is not subject to apostille), applicants must obtain a certified true copy from the apostille issuing government authority or from the Korean embassy on a notarized copy. If the authenticity of the submitted document is unclear, such application may be put at a disadvantage during evaluation.
- If an applicant graduated from a third country, he or she may obtain a consular confirmation from the embassy of the relevant country on the graduation certificate and academic transcript.
- Required certificates that are issued in digital format must also be apostilled (or consular confirmed)
- If there is an expiration date on an apostilled or consular confirmed document, the validity of the document will be judged based on the date indicated on the authentication. If there is no specific date indicated, the document will be accepted if it was submitted within two years from the date of authentication.

5. Financial Certificate Document

- Applicants who are exempted from Korean language program* can replace their Financial documents with a confirmation of tuition support issued by the university headquarters.
 - * TOPIK Level3 or higher/ TOEIC 750, TOEFL PBT 550, TOEFL iBT 79, new TEPS 327, IELTS 6.0 or higher
 - Applicants who have graduated from a university in Australia, Canada, Ireland, New Zealand, Great Britain, or the United States are exempted from the English Proficiency Test.
- Applicants who need to complete Korean language program (D-4 visa) is required financial documents according to the Ministry of Justice's and Education Guidelines.

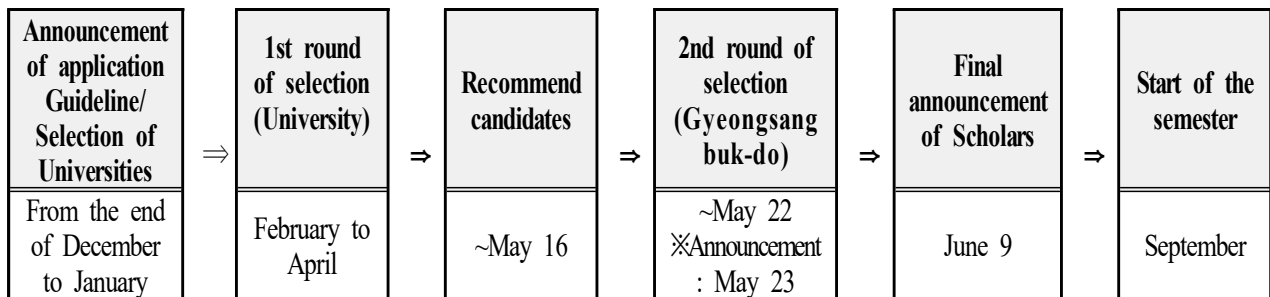
<According to the Ministry of Justice's and Education Guidelines>

- Required documents

- ① Degree program (D-2) : (local) Original bank certificate of deposit balance showing a minimum of KRW16,000,000 ⇒ Can be substituted with financial documents
- ② Korean language program (D-4) : (local) Original bank certificate of deposit balance showing a minimum of KRW8,000,000

6. Selection Procedure and Schedule

Selection Procedure



※ Applicants should check with the university for detailed information

Selection Schedule

selection of university (Gyeongsangbuk-do)	- announcement of application guidelines to Selection of Universities. ※ Announcement on the provincial website (www.gb.go.kr).
Announcement selection schedule /application (University)	- Selected universities announce their selection plan and schedule for application ※ Application deadline set by the university.
1st Round Selection (University)	- The date of announcement of results is the date set by the university. ※ Information will be provided on each university's website.
Recommended successful candidates (University → Gyeongsangbuk-do)	- Official documents arrive at Gyeongsangbuk-do by May 16
2nd Round Selection (Gyeongsangbuk-do)	- Selection period: May 19. to May 22. - Announcement of successful candidates: May 23. ※ Notification of the list of successful candidates to the university in an official letter.
Submission of medical examination results (University → Gyeongsangbuk-do)	- Target: All applicants who passed the 2nd round - Deadline: Until June 2
Announcement of Final Successful candidates (Gyeongsangbuk-do)	- Announcement date: June 9 - Notify the university with a list of successful applicants in an official letter ※ Reserve numbers will be assigned, considering potential withdrawals after the final selection, allowing for additional selection.

※ Please note that the list of successful and final successful candidates and important notice for successful applicants will be notified to the university, Not individually notified to the applicant.

7. Application and Evaluation

Application

○ **Application period and procedure**

- Please check the website of each University.

○ **Items to note when filling out the application form**

- Applicants must put the official name of the university/department they are applying to.
- Applicant's English name must match the name on their passport.
- Applicants must check the completeness and authenticity of all application documents.
- Application documents must be submitted in the order of the "Application Checklist." which itself should be the front cover of each set of application documents. Please number and label each document on the top right corner.
- All documents should be submitted as a A4 sized (or letter sized) documents
 - ※ If a document is smaller than A4 sized (or letter sized) document, attach it on a blank A4 sized paper.
 - If a document is larger than a A4 size document, fold the document into a A4 size.

Evaluation

○ **Main points of Evaluation**

- **Review of Qualification** : Selection committee will conduct document examination (citizenship, level of education, academic grades, etc.) and verify whether an applicant is qualified for the program.
- **Review of Competency** : Selection committee will evaluate each applicant's competency through document examination and oral interview*.
 - ※ There is no oral interview in the second round of selection.

- **Authenticity Check** : If necessary, the university and Gyeongsangbuk-do may inquire about the facts contained in the application materials to the relevant governments and universities.
- **Additional Points**
 - Applicants who hold a TOPIK level 3 or above will be given additional points (10% of the total allocated points).
 - Direct descendants of Korean War veterans who participated in the Korean War as a foreign military will be given additional points (5% of the total allocated points).

8. Final Announcement

Announcement of successful candidates

○ Announcement of final successful candidates

- Gyeongsangbuk-do will notify the list of final successful candidates to universities by June 9, 2024
- Applicants who have obtained a certain grade or higher in Korean/English examination* or who are exempted from the English examination will be confirmed as early entrants to the degree program, and other successful candidates need to take the Korean language program.

* TOPIK Level 3 or higher/ TOEIC 750, TOEFL PBT 550, TOEFL iBT 79, new TEPS 327, IELTS 6.0 or higher(valid)

** Applicants who have graduated from a university in Australia, Canada, Ireland, New Zealand, Great Britain, or the United States are exempted from the English Proficiency Test.

Important Notes for Successful Candidates

○ Final Successful Candidates' Withdrawal

- If a final successful candidate wishes to withdraw from the program after the final announcement, he or she should submit a signed letter of scholarship renunciation (free form) to the university that conducted the first round of selection.

- Once a scholarship is renounced, it cannot be reversed. Final Successful Candidates who renounce their scholarship before the enrollment cannot reapply for the K-GKS program for the next three years.
- **Graduation Certificate**
 - Selected scholars should prepare multiple copies of apostilled or consular confirmed graduation certificate before their entry to Korea. Scholars need to submit their authenticated certificate to the degree university (for an issuance of Standard Admission Letter), to the embassy (for visa issuance), and to the Korean immigration office (for a renewal or an update of their status of residence in Korea)
 - Scholars who wish to proceed to their degree program after the Korean language program may need to return to their home country for a certificate reissuance if the required documents are not prepared in advance.
 - Any documents submitted for selection, such as graduation certificate documents, will not be returned(kept for more than five years).
- **Final Successful Candidates residing in Korea**
 - Final successful candidates who have Korean residence visa (D-2, D-4, etc.) may not be able to receive a new visa for their Korean language program or degree program in Korea.
 - ※ To avoid any visa related issues, after the final announcement, final successful candidates who are residing in Korea should contact the Immigration office immediately to inquire about a new visa. Your inquiry should entail the necessary procedure and required documents in obtaining a new visa.
 - Entry airfare will NOT be provided to newly selected scholars who are residing in Korea at the time of the final announcement.

○ **Check applicable Laws and Regulations**

- Guide the final successful candidates to fully familiarize themselves with laws related to immigration and stay in Korea, K-GKS academic guidelines, academic management regulations of Korean language training institutes and universities.

- University, school regulations, academic regulations, etc.: Refer to each university's website
- Laws related to immigration and period of stay
 - www.immigration.go.kr
 - www.hikorea.go.kr

○ **Entry Support to Korea**

- Each university will purchase economy class one-way flight tickets on behalf of the selected scholars.
- If a scholar purchases the flight ticket due to unavoidable circumstances, the airfare will be reimbursed by the university after entering Korea.
- On applicants' initial arrival to Korea, any domestic travel fees within Korea and a scholar's home country are not supported.
- Insurance premiums related to the process of entering Korea are not covered
- Entry airfare or visa application support will NOT be provided to scholars who enter Korea from a country other than the scholar's own country of citizenship.

9. Scholarship Information

Scholarship Period

○ **Master's Degree Program**

- 3 Years (1 year of Korean language program + 2 years of degree program)

○ **Doctoral Degree Program**

- 4 years (1 year of Korean language program + 3 years of degree program)

※ Admission to degree programs is possible without the requirement of a Korean language training course

○ **Important Notes Regarding Scholarship Period**

- All scholarship students must obtain TOPIK level 3 during the one-year Korean language program period to be eligible to enter the degree program.

※ If you do not obtain TOPIK level 3 within one year, you can extend the Korean language training course for 6 months only once, and you will be responsible for 50% of the language training fee.

- Scholars who have obtained TOPIK Level 3 or above OR will be exempt from a Korean language program.

- Applicants who have obtained a certain grade or higher in Korean/English examination* or who are exempted from the English examination** are exempted from taking the Korean language program and begin a degree program immediately.

* TOPIK Level 3 or higher/ TOEIC 750, TOEFL PBT 550, TOEFL iBT 79, new TEPS 327, IELTS 6.0 or higher(valid)

** Applicants who have graduated from a university in Australia, Canada, Ireland, New Zealand, Great Britain, or the United States are exempted from the English Proficiency Test.

- Those who receive TOPIK level 3 or above within the first 6 months of the Korean language program, will be exempt from the remaining 6-month language program and must start their degree program in the following semester (March 2026).

□ Scholarship Benefits

Scholarship	Airfare	Academic incentives (monthly allowance, medical insurance, Korean Proficiency Grants, etc.)	Language Training Fee	Tuition
Benefits	Economy class flight actual expense	(Language)1,180,000 KRW	- Province: 1.3 million KRW -University: Excess	- Province: 5 million KRW -University:Excess
		(Degree)1,310,000 KRW		
Time	At the time of initial entry (once)	Monthly * Payment schedule to be determined by each university	Beginning of each quarter (quarterly)	Beginning of each semester (twice a year)
Procedure	Gyeongsangbuk-do → Universities → Scholars		Gyeongsangbuk-do → Universities	

* Scholars who are already benefiting will raise the amount of support from March 2025

○ Important Notes Regarding Scholarship Benefits

- All scholarship students complete the "Gyeongbuk Global School" international student program, which is scheduled for a duration of two weeks.
- ※ “Gyeongbuk Global School” is a program that introduces the alien policy of Gyeongsangbuk-do and provide scholars with opportunities to experience Korean culture, tourism, laws and etc., to help them study in Gyeongsangbuk-do.
- If a scholar withdraws from the scholarship within the first 3 months after the enrollment to their university, one MUST return the full scholarship amount that he or she has received after being selected as a K-GKS scholar (entry airfare, settlement allowance, monthly allowance, tuition, etc.
- Even if 3 months have passed since entering Korea, if the scholarship status changes, part of the already paid scholarship can be refunded or can be deducted from the next payment

10. Contact information

- **Reference site**

- University notification (higher education information)
: www.academyinfo.go.kr
- Visa & entry : www.immigration.go.kr/ www.hikorea.go.kr
- Ministry of Foreign Affairs : www.mofa.go.kr
- Korea Portal : www.korea.net
- King Sejong Institute : www.sejonghakdang.org
- Gyeongsangbuk-do : www.gb.go.kr

- **Gyeongsangbuk-do Division of Alien Communities** : euhak216@korea.kr

- **Contacts of Universities staff**

No	Universtiy	Department	Phone (countrycode:82)	e-mail
1	Kyungpook National University (Sangju)	International Affairs Office	53-950-2433	kgsp@knu.ac.kr
2	Kumoh National Institute of Technology	International Programs & Language Education Center	54-478-7221	eugene@kumoh.ac.kr
3	National University of Gyeongsangbuk-do (Andong National University)	Office of International Cooperation	54-820-7101	anuglobal@anu.ac.kr
4		Office of International Cooperation	54-820-7102	anukorea@anu.ac.kr
5	Daegu University	Graduate Administration Office	53-850-5037	grad@daegu.ac.kr
6	Daegu University	Graduate Administration Office	53-850-5038	grad@daegu.ac.kr
7	Yeungnam University	Graduate Administration Office	53-810-3782	graduate@yu.ac.kr
8	Pohang University of Science & Technology	Admissions	54-279-3782	grad-admission@postech.ac.kr

11. Appendix(G.P.A Conversion Table)

4.0 Scale	4.3 Scale	4.5 Scale	5.0 Scale	100 Points Scale
3.97~4.0	4.26~4.3	4.46~4.5	4.95~5.00	100
3.92~3.96	4.22~4.25	4.41~4.45	4.90~4.94	99
3.88~3.91	4.17~4.21	4.36~4.40	4.84~4.89	98
3.84~3.87	4.12~4.16	4.31~4.35	4.79~4.83	94
3.80~3.83	4.08~4.11	4.26~4.30	4.73~4.78	96
3.75~3.79	4.03~4.07	4.21~4.25	4.68~4.72	95
3.71~3.74	3.98~4.02	4.16~4.20	4.62~4.67	94
3.67~3.70	3.93~3.97	4.11~4.15	4.57~4.61	93
3.62~3.66	3.89~3.92	4.06~4.10	4.51~4.56	92
3.58~3.61	3.84~3.88	4.01~4.05	4.45~4.50	91
3.49~3.57	3.75~3.83	3.91~4.00	4.34~4.44	90
3.41~3.48	3.65~3.74	3.81~3.90	4.23~4.33	89
3.32~3.40	3.56~3.64	3.71~3.80	4.12~4.22	88
3.24~3.31	3.46~3.55	3.61~3.70	4.01~4.11	87
3.15~3.23	3.37~3.45	3.51~3.60	3.90~4.00	86
3.07~3.14	3.27~3.36	3.41~3.50	3.79~3.89	85
2.98~3.06	3.18~3.26	3.31~3.40	3.68~3.78	84
2.90~2.97	3.09~3.17	3.21~3.30	3.57~3.67	83
2.81~2.89	2.99~3.08	3.11~3.20	3.45~3.56	82
2.72~2.80	2.90~2.98	3.01~3.10	3.34~3.44	81
2.64~2.71	2.80~2.89	2.91~3.00	3.23~3.33	80