

Program: Doctoral Program in Science, Technology, Environment, and Mathematics  
 Degree Requirements ( Applicable to students enrolled in the 2023-24 academic year )

Required Credits for Graduation: 18 credits (30 credits for those admitted through direct admission)	
Mandatory Courses: 4 credits	Credit(s)
Seminar (I)	1
Seminar (II)	1
Seminar (III)	1
Seminar (IV)	1
Selected Courses: 14 credits (26 credits for those admitted through direct admission)	
Credits earned from taking English-taught courses offered by the College of Science and the College of Engineering can be included in the required credits for graduation with the approval of the advising professor(s).	
<b>Language Proficiency:</b> A minimum level of competence in English is required before degree examination.	
<b>Academic Research Ethics Education:</b> implemented in the 2023-24 academic year	
<b>Alternative to the Academic Research Ethics Education:</b> None	
Notice:	
I. Applicable Objects	
Applicable to doctoral students of the “Doctoral Program in Science, Technology, Environment, and Mathematics” (hereinafter referred to as STEM PhD Program) enrolled in the 2023-24 academic year. International students can apply for this program in accordance with relevant regulations. If a doctoral student is selected for the Industry-Academia Cooperative PhD Project (IA PhD) supported by the Ministry of Education at the time of enrollment, he/she will be an IA PhD student.	
II. Qualifying Examination	
1. STEM PhD students should pass the qualifying examination for doctoral candidates within four years of admission (IA PhD students, within three years). Failing to pass the qualifying examination within the prescribed time will lead to the revocation of one’s student status.	

2. The qualifying examination will be public oral presentation. A proposal should be submitted to the STEM PhD Program seven days prior to the qualifying examination. The oral presentation and the proposal should address and focus on the applicant's on-going research work and plan for future research.

### III. Degree Examination

1. STEM PhD students (including IA PhD students) are eligible to apply for degree examination only after completing the required course credits, obtaining the AREE certificate of completion, passing the doctoral qualifying examination, reaching the required English proficiency level, completing dissertation, and receiving approval from advisor(s).
2. A minimum level of competence in English is required before degree examination. The required minimum scores are: 527 on TOEFL ITP, 71 on TOEFL iBT, 5.5 on IELTS, 700 on TOEIC, or passing of the first stage of the High-Intermediate Level on GEPT. For those who fail to earn any of the above-mentioned English proficiency test reports, passing of an on-campus English proficiency test or passing of an English-taught academic writing course can be deemed as an alternative. International students from English-speaking countries or countries where English is the official language may apply for an English proficiency test waiver to be approved by the program affairs committee.
3. Dissertation must fulfill the following publication requirements that the candidate has at least one research article accepted by SCI journals and is the first author or corresponding author of the said research article.
4. In addition to meeting the aforementioned publication requirements, IA PhD students have to propose industry-related and innovative research result and submit any of the following to the Program Office.
  - (1) A copy of a formal patent application;
  - (2) A copy of a formal industry-academia cooperative planning;
  - (3) A copy of a formal project-based research and development planning;
  - (4) Two copies of professional report jointly made by the candidate and the contracted industrial institution.