

+++++

# KINGS

**2026 RCA KINGS ADMISSION GUIDELINES**  
**for Master's Degree Programme**





## CONTENTS



Admission Guidelines .....	03P
Education Program .....	06P
Financial Details .....	10P
Campus Life .....	12P
Course Description .....	14P

# ADMISSION GUIDELINES

## ADMISSION POLICY

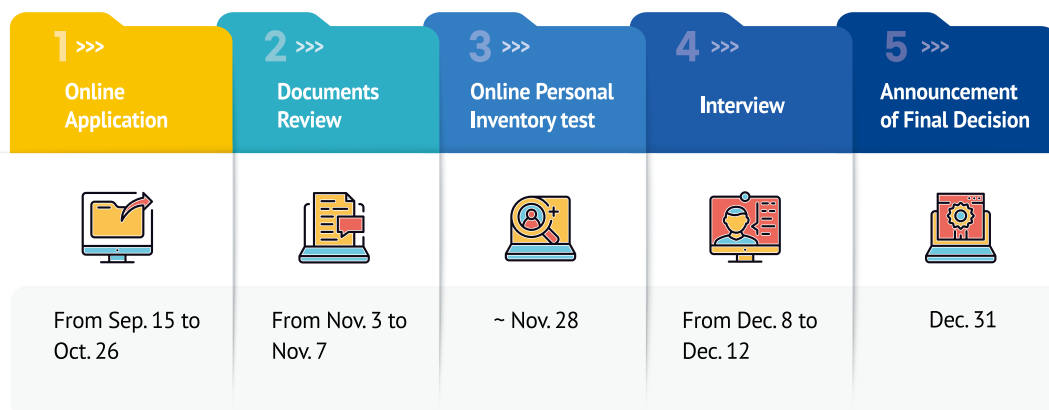
- KINGS desires future-oriented and experienced applicants who are working in energy related fields.
- Motivated and open-minded individuals are invited to apply.
- An ability to study in cross cultural environments is an essential asset for KINGS admission.
- KINGS is an accredited institution by the Ministry of Education of Korea.

## ADMISSION CRITERIA

Eligibility criteria such as academic background, work experience, letter of recommendation, and language requirement is described in table below.

Requirement	Details
Academic Background	Bachelor's Degree or Higher
Work Experience	+1 Year Preferred
Letter of Recommendations	Company, Government or Academic Supervisor
Language Requirement	Certified English Test Score or Equivalent Language Proficiency for applicant from non-English speaking countries

## TIMELINES



\* Timeline is subject to change.



## How to Apply

- ▶ To access the on-line application, find the “**Apply Now**” banner on the KINGS website([www.kings.ac.kr](http://www.kings.ac.kr)), under the “**Admission**” menu.
- ▶ Create your own account and fill in all the required information for each page of them.
- ▶ The on-line application page will be available only during the official application period. Please refer to the notice on KINGS website for the 2026 application period.

## Required Documents <sup>1)</sup>

1	Application for admission	Form 1
2	Statement of purpose	Form 2
3	Study & career plan	Form 3
4	Certificate of employment	Form 4
5	Two letters of Recommendation	Form 5
6	Original diploma and transcripts of undergraduate degree <sup>2)</sup>	
7	Proof of proficiency in English	
8	Verification and Consent to the integrity of the documents	On-line system

<sup>1)</sup> All forms(1~5, 8) are provided at the application system ([www.kings.ac.kr](http://www.kings.ac.kr)).

Identification photo taken within 3 months (black and white, snapshot photo will not be accepted).

<sup>2)</sup> A recommendation from the RCA national representative of the applicant's country is required, and it can be written in free form. **A copy of the representative's letter should be sent to Admission and Student Affairs Team@kings.ac.kr** with the file name “RCA Recommendation\_(Name in full).pdf” by the deadline for online application. Information on National Representatives can be found at <http://www.rcaro.org/states>.

<sup>3)</sup> For academic credentials, an overseas degree should be approved either by apostille or consular confirmation by local Korean Embassy. It may be replaced as a PDF document of the original as you consent to verify yourself at the application system.





## Proof of English Proficiency

- ▶ An applicant whose native language is not English MUST demonstrate his/her English language proficiency by submitting any certificates from authorized institutions.

※ Exemption from submission of English Test Report

1. Applicants from Australia, New Zealand(Native English Speaker).
2. Applicants from a country that uses English as an official language.
3. Applicants who have completed their entire university courses in English  
(It is required to submit certificates verifying that courses are fully taught in English.)

## Important Notice

- ▶ For the applicants who pass the documents review are required to take Personal Inventory Test through on-line. Internet access link will be sent individually.
- ▶ All application documents must be typed(not hand-written) in English.
- ▶ Non-English documents are not accepted, but it is possible when attaching a notarized English translation.
- ▶ All submitted documents will NOT be returned.
- ▶ If an applicant has gained admission in an illegal manner(through forgery, alteration of documents, of document translation errors) then the admission will be nullified. Furthermore, if a criminal case is suspected, the candidate/student will be reported to the authorities of the Republic of Korea and of the applicant's home country in compliance with the law.

## Application Fee

- ▶ KINGS does not charge an application fee for international students.

## Mailing Address

- ▶ Room #510 main building  
658-91 Haemaji-ro, Seosaeng-myeon, Ulju-gun, Ulsan 45014 Republic of Korea  
[admission@kings.ac.kr](mailto:admission@kings.ac.kr)



# EDUCATION PROGRAM

---

## Department of Energy Policy and Engineering





## Introduction

Energy is the backbone of national industry and an essential resource in our daily lives. Energy policy is inherently complex, involving a delicate balance between economic efficiency, environmental stewardship, and long-term sustainability. As the importance of strategic public investment and budget planning continues to grow, effective national energy planning and management has never been more critical.

The Department of Energy Policy and Engineering at KINGS offers a graduate curriculum designed to equip students with the knowledge and skills needed to address challenges within this multifaceted system. Our program fosters global energy leaders capable of integrated problem-solving through a combination of academic theory, hands-on training, and peer learning with professionals from electric utilities and international public institutions.

The department offers a two-year master's program, leading to either a Master of Engineering (ME) or a Master of Science (MS) in Energy Policy and Engineering.



## Graduation Requirements



### Degree Type

- Master of Engineering (ME) in Energy Policy and Engineering
- Master of Science (MS) in Energy Policy and Engineering



### Common Requirements

- Minimum of 36 credits, Minimum GPA of B- (2.7/4.3)
- Study Period: 2 years (March 2026 - February 2028) at KINGS
- Thesis (MS) or Project Report (ME) approved by the Examining Committee



### Additional Requirements for MS Degree

- Satisfy one of the following requirements:
  - An oral presentation at a domestic or international academic conference organized by a society that publishes journals listed as Korea Citation Index (KCI) candidate or higher (including SSCI, SCIE, SCOPUS, KCI, KCI candidate journals)
  - Thesis Submission (in whole or in part) to a journal listed as KCI candidate or higher (including SSCI, SCIE, SCOPUS, KCI, KCI candidate journals), accompanied by positive feedback from the journal (e.g. acceptance, acceptance with revision, a request for revision and resubmission, or similar)



# FINANCIAL DETAILS

## Tuition & Fees<sup>1)</sup>

### Tuition

Tuition is 48.4 million KRW per academic year. Tuition covers lectures, lecture materials, access to the library, and access to other facilities relevant to academic activities.

### Matriculation Fee

Matriculation fee is 1 million KRW.

### Living Cost

Total rate of room and board is 12.8 million KRW per year including three meals a day.

<sup>1)</sup> All fees and costs are based on the 2025 academic year and are subject to change for the 2025 academic year.





## Financial Aid & Service

### Scholarship

The KINGS Global Scholarship covers a maximum of two years of full-time study. All new eligible international students are awarded the global scholarship. To maintain the KINGS global scholarship, recipients must have satisfied the requirements (minimum GPA of B-, 2.7/4.3) as outlined in KINGS regulations. The scholarship covers the above mentioned tuition, matriculation fee, and room & board fee.

RCA provides sponsorship for the KINGS Master's Degree Program in Energy Policy and Engineering based on RCA policy. Please visit the website (<http://www.rcaro.org/>) and contact the RCA Regional Office for detailed information.

— Regional Cooperative Agreement for research, development and training related to nuclear science and technology for Asia and the Pacific.

### Assistantship

**Administrative Assistantships(AA)** are available to international students through a selection process. Selected students will be working on tasks designated by their assigned department. Students can work up to 20 hours per month and will receive a stipend of up to 300,000 KRW, based on the actual hours worked.

### Medical & Insurance

The Korean government requires mandatory health insurance. Any foreigner who has stayed for more than six months must subscribe to the Public National Health Insurance since 1 March 2021. The amount of health insurance fee is approximately 75,000 KRW per month.

KINGS provides basic health check-ups and care at the health office. For international students who need medical treatment at a hospital, KINGS health office refers the hospital information to the students.



# CAMPUS LIFE

## Facilities

- ▶ KINGS dormitory has 200 single occupancy rooms, a cafeteria, and an Islamic prayer room.
- ▶ Each dormitory room is equipped with a bathroom, a study desk, a single bed, and a refrigerator.
- ▶ KINGS cafeteria provides regular Korean and Western meals.
- ▶ A fully furnished common kitchen is also available for student use.
- ▶ Residential facilities including tennis and basketball courts, a futsal field, a ping-pong room, and a gym are available.
- ▶ KINGS has a high-speed internet connection which students can access on campus, free of cost.
- ▶ A Kookmin Bank(KB) ATM is also available on campus.

## Monthly Events for Students

February, 2026	March	April
Orientation	Matriculation 1 <sup>st</sup> Semester Open	Spring Event
May	June	July
Student council election Teacher's Day	1 <sup>st</sup> Culture Trip	Summer Session
August	September	October
Summer Vacation	2 <sup>nd</sup> Semester Open	Fall Event
November	December	
Photo Shoot	Winter Vacation Commencement	

※ The schedule is subject to change.

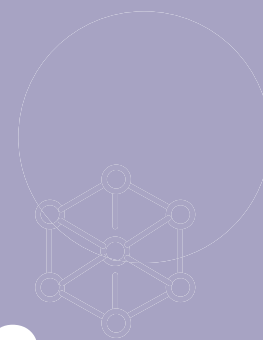
For more information, visit the KINGS website([www.kings.ac.kr](http://www.kings.ac.kr)) or contact Admission and Student Affairs Team at [admission@kings.ac.kr](mailto:admission@kings.ac.kr)



658-91 Haemaji-ro, Seosaeng-myeon, Ulju-gun, Ulsan 45014 Republic of Korea  
[www.kings.ac.kr](http://www.kings.ac.kr)







# Course Description

---

## Department of Energy Policy and Engineering



## Curriculum & Study Areas



### Energy Policy and Management Track

The Energy Policy and Engineering Track offers a comprehensive curriculum designed to provide students with an in-depth understanding of the technical, economic, and policy dimensions of the energy sector.

This program integrates foundational knowledge with advanced analytical skills, preparing students for various roles in energy management, policy-making, and technical operations.



#### Study Areas

Net-Zero Microgrid and Small Modular Reactor, Financial Management, Environment Policy and Utility Management, Net-Zero Technology and Project Development, Project Valuation and Risk Management, Grid Planning and Power System Development



#### Compulsory Courses\*

- Electric Resource Planning and Optimization
- Electric Power System Economics
- Electricity Market Design and Operation
- Grid Planning and Power System Development
- Project Valuation and Risk Analysis
- Leadership and Communication, Technical Writing, Speech and Debate, Cross Cultural Program
- Thesis and Individual Project Report



#### Elective Courses\*

- Net-Zero Technology and Grid Transformation
- Net-Zero Microgrid and Small Modular Reactor
- Corporate Finance and Accounting
- Environmental Policy and Utility Management
- Introduction to Data Analysis and Machine Learning
- Data Analysis and Application

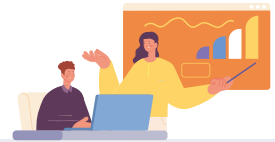
※ The Compulsory Courses and Elective Courses are based on the 2025 academic year curriculum and are subject to change.







## Common Compulsory Courses



### Electric Resource Planning and Optimization

This course explores how to optimally combine and operate diverse energy resources by considering various sustainability variables important to power companies. It frames this challenge as an optimization problem involving several policy variables. Students will quantitatively analyze optimal resource plans using professional tools and practical system data to derive the best alternatives. In this course, students will learn methods for energy resource planning for a given country or region using energy analysis models such as the WASP (Wien Automatic System Planning) model and EnergyPLAN.

### Electric Power System Economics

This course examines the investment and operation of power systems in the context of competitive electricity markets. It covers fundamental microeconomic concepts, market organization, operational reliability, ancillary services, network congestion, and investments in transmission and generation. The instructor, drawing on extensive field experience, provides practical insights into these issues. Students will learn to develop innovative solutions to power system problems, tailored to varying conditions across different countries, markets, and companies. PLEXOS and PowerWorld simulations enhance students' understanding of economic principles.

### Electricity Market Design and Operation

This course examines the dynamic evolution of electricity markets, focusing on the roles of policymakers, regulators, and stakeholders. It covers regulatory schemes, market design, operational processes, and risk management, with an emphasis on hands-on experimental market design. The instructor will share practical insights from extensive field experience. Students will gain a comprehensive understanding of the complexities of market design and operation, as well as investment and risk management in competitive electricity markets.

### Grid Planning and Power System Development

This course delves into the technical and economic aspects of power systems, covering essential topics like load flow calculation, fault current calculation, and stability techniques crucial for power system design and operation. Real-world transmission network development cases will be highlighted to connect theory with practical application. Through hands-on experience with industry-standard simulators like PLEXOS and PowerWorld, students will develop a strong understanding of grid planning and power system operations.

### Project Valuation and Risk Analysis

This course equips students with financial tools essential for making sound energy investment decisions, emphasizing the connection between corporate finance knowledge and project valuation and risk analysis. It focuses on how energy investors apply financial models to enhance project value and achieve financial flexibility for their core investment strategies. The course is divided into two main parts: Project Valuation and Risk Analysis. It applies EXCEL for cash flow modeling and STATA for data analysis. The PALISADE RISK ANALYSIS, a Monte Carlo Simulation tool, is also used for quantitative risk analysis.

### Leadership and Communication

Based on Harvard's Leadership and Negotiation Program, this course series trains current and future leaders of energy or nuclear/radiological organizations to become adept at internal and external communication. It involves understanding oneself and others, learning the "principled negotiation" model, and engaging in interactive class activities and reflection assignments. The advanced fall semester course further develops these skills through complex cases and individualized coaching, requiring active participation and reflection assignments to build on the foundational skills from the initial course.

### Technical Writing

These courses systematically develop students' technical writing skills for academic and professional contexts in engineering and science. Beginning with an introduction to the structure and conventions of academic papers, students progress through hands-on drafting, literature review, and the iterative process of receiving and applying feedback. Each course emphasizes clarity, coherence, and adherence to ethical standards in technical English writing. Students independently prepare and revise a conference paper, culminating in a polished, finalized manuscript by the end of each semester. Through ongoing guidance and detailed feedback from professors, students gain the practical expertise needed for successful technical communication.

### Speech and Debate

This course enhances students' public speaking, group discussion, oral presentation, written communication, and critical thinking skills through the use of debating techniques to analyze social, political, and economic issues. Students engage in discussions and formal debates on key issues affecting businesses and the global community. After learning the basics of argumentation, refutation, case construction, and presentation techniques, students produce a video recording of their own presentation as a term project.

### Cross Cultural Program

This program consists of three sub-programs: Culture Korean (CK), Cross Culture (CC), and Culture Trip (CT). CK aids international students in developing basic spoken and written Korean, focusing on communicative language skills. CC fosters stronger cultural understanding and respect for cultural diversity by enhancing communication skills and promoting cultural exchanges between Korean and international students. Additionally, CT is offered at the end of each semester to encourage social and cultural interactions among students.



## Elective Courses

### Net-Zero Technology and Grid Transformation

This course examines various net-zero technologies, including renewables, energy usage, and SMRs, and their integration into power grids. Through lectures and insights from industry experts, students will explore the technical requirements for these technologies from the perspectives of grid operators and renewable energy developers. The course provides both practical insights and a framework for evaluating energy technology systems and evolving power grids in engineering and economic contexts. Simulators like PLEXOS and PowerWorld will be used to deepen students' understanding of key concepts in grid transformation and decarbonization.

### Net-Zero Microgrid and Small Modular Reactor

This course covers the components and operation of microgrids, which include small power supplies, batteries, and monitoring/control equipment, highlighting the role of SMR technology. Microgrids usually operate with the utility power system but can function independently during accidents, ensuring high reliability. The course focuses on the optimal combination and economic operation of power facilities and energy storage devices. In this course, students will learn optimal microgrid planning methods for a given region using microgrid analysis tools such as HOMER and Python-based modeling.

### Corporate Finance and Accounting

This course provides a comprehensive overview of energy finance, integrating general finance theories with practical decision-making tools and Excel techniques for financial analysis. Key topics include capital budgeting under uncertainty, risk and return, capital structure, and power project valuation. The second part of the course focuses on regression analysis essential for data forecasting. The course will use EXCEL for basic financial analysis as well as STATA for data analysis.

### Environmental Policy and Utility Management

This course offers an overview of key principles and current issues in energy and environmental economics, focusing on market dynamics, policy impacts, and sustainability. Students gain analytical tools to address real-world challenges in the energy and environmental sectors.

### Introduction to Data Analysis and Machine Learning

An introduction to Python programming and statistics, this course covers measurement principles, probability distributions, correlation, and regression. It includes an overview of artificial intelligence and machine learning applications.

### Data Analysis and Application

This course explores the application of AI techniques—such as machine learning and neural networks—in optimizing power system operations. Through practical exercises, students gain hands-on experience in load forecasting and energy management, developing key skills for real-world power systems and nuclear energy applications.

### NPT, Nuclear Disarmament & Non-Proliferation

This course explores the Nuclear Non-Proliferation Treaty (NPT) with a focus on its three pillars: non-proliferation, disarmament, and peaceful uses of nuclear energy. Students examine key issues such as the dual-use nature of nuclear technology, the North Korean nuclear crisis, and the role of nuclear energy in global security and climate change.

### NPT, Verification & Peaceful Nuclear Uses

As a continuation of the first-semester course, this course delves deeper into nuclear non-proliferation, with emphasis on safeguards, verification, and sanctions. It also explores legal frameworks for peaceful nuclear cooperation, the role of the IAEA, and the contribution of nuclear energy to climate goals and the UN SDGs. Emerging technologies like AI and cybersecurity in peaceful nuclear use are also addressed.





# KINGS

KEPCO INTERNATIONAL  
NUCLEAR GRADUATE SCHOOL







# 2026 RCA KINGS ADMISSION GUIDELINES for Master's Degree Programme

