

Kyoto University Graduate School of Advanced Integrated Studies in Human Survivability [5-year doctoral program]

Supplemental Information for the General Entrance Examination and the Special Admission for International Students for Admission in Academic Year 2025

Supplementary information on the written examination (basic specialized questions)

The disciplines and scope of the questions are as follows.

Disciplines	Scope of the questions
Chemistry	Examinees will be required to answer two questions from among the following subjects to exam the basic academic knowledge of chemistry. - Organic Chemistry - Inorganic Chemistry - Physical Chemistry - Analytical Chemistry
Environmental Science	Examinees will be required to answer two questions from among the following subjects. - International framework for the global environmental conservation - Aquatic environmental protection
Mechanical Engineering	Examinees will be required to answer two questions from among the following subjects. - Fluid Dynamics - Thermodynamics - Mechanics of Materials
Economics	Examinees will be required to answer two questions, one on each of the following subjects. - Supply and Demand - Microeconomics and Public Policy
Sociology	Examinees will be required to answer two questions from all fields of sociology (including basic concepts, theories, and research methods).
Informatics	1. Basic Subjects Examinees must answer one question on the following subject: (1) Data Structures and Algorithms 2. Specialized Subjects Examinees must choose and answer one question from the following two questions: (1) Graph Theory and Network Science (2) Data Science and Machine Learning

Psychology	<p>Examinees will be required to answer two questions:</p> <p>(1) Knowledge in any of the areas of perception, cognition, and learning</p> <p>(2) Understanding of research methods in psychology in general</p>
Mathematics	<p>1. Basic Subjects</p> <p>"Calculus (including calculus of several variables and the vector calculus)" and "Linear Algebra (including diagonalization and the Jordan normal form of a matrix)".</p> <p>Examinees must answer all the questions.</p> <p>2. Specialized Subjects</p> <p>"Fundamentals of complex function theory of one variable", "Differential equations (including partial differential equations)", "Fundamentals of the Fourier analysis" and "Numerical analysis and numerical computations".</p> <p>Four questions will be given, and examinees must choose two questions to answer during examination. The required level of each question is based on subjects studied in/before the third-year undergraduate course in faculty of science or of engineering.</p>
Biology	<p>Examinees will be required to answer two questions from among the following subjects.</p> <ul style="list-style-type: none"> - Insect Ecology - Plant Genetics - Reproductive Biology - Coastal Marine Ecology
Life Science	<p>Examinees will be required to answer two questions from among the following subjects.</p> <ul style="list-style-type: none"> -Botany -Molecular and Cellular Biology (Ultrastructural Virology) -Symbiotic and Coevolutionary Mechanisms -Functional Biology -Genome Biology
Philosophy	<p>Examinees will be required to answer two questions, one on each of the following subjects.</p> <ul style="list-style-type: none"> - Philosophy 1 (Eastern Thought) "Foundations of Buddhist Thought" -Philosophy 2 (Western Thought) "Foundations of Ancient (Greco-Roman) Philosophy"
Electrical Engineering	<p>Examinees will be required to answer two questions on the following subjects.</p> <ul style="list-style-type: none"> - Electromagnetism - Electric Circuits
Agricultural Science	<p>1. Basic Subjects</p> <p>Examinees must choose and answer one question from the following two subjects.</p> <p>(1) Biochemistry</p> <p>(2) Soil Physics</p> <p>2. Specialized Subjects</p>

	<p>Examinees must choose and answer one question from the following two subjects.</p> <p>(1) Applied Microbiology</p> <p>(2) Irrigation and Drainage</p>
Physics	<p>Examinees will be required to answer two questions on the following subjects.</p> <ul style="list-style-type: none"> - Quantum Mechanics - Statistical Mechanics
Literature	<p>Examinees will be required to answer two questions, one on each of the following subjects.</p> <ul style="list-style-type: none"> - The Anglophone theory of literature in the aftermath of the second world war - Contemporary Japanese literature at the beginning of the 21st century
Law and Political Science	<p>Examinees will be required to answer two questions in the field of “international law” (including the relations with states, international organizations, domestic laws, and human rights).</p>
Historical Science	<p>Examinees will be required to answer two questions, one on each of the following subjects.</p> <ul style="list-style-type: none"> - History of modern science and technology - Theories of history after 1950