# Graduate School of Science

By conducting cutting-edge research and providing training that encourages students to perform their own research, the Graduate School of Science nurtures the ability to both uncover new problems and find their solutions. With this aim in mind, it cultivates in students advanced research skills that enable them to cope with recent developments in natural sciences, and provides them with well-rounded knowledge that forms the basis of their research capacity. With this knowledge and research skill, graduates have the ability to take an active role in a wide range of fields in the knowledge-based society of the twenty-first century as highly specialized professionals, educators, and researchers.

The education and research opportunities available to students are not limited to those offered on the university campus. Graduate students can also expand their intellectual horizons at labs such as the Institute of Physical and Chemical Research (RIKEN), or other research facilities and universities in Japan and abroad. In order to foster professionals capable of advancing twenty-first century science and to enable graduate students to conduct independent research, Rikkyo University provides extensive support in the form of scholarships, research grants, and subsidies to encourage students to present their research at academic conferences.

## Field of Study: Physics

1. The Graduate Degree Program in Physics carries out research on a wide spectrum of cutting-edge topics in modern physics, from micro-particles to the vastness of the universe, in the search for answers to unsolved mysteries.
2. Specific fields of research include theories, experiments, and observation of micro-particles and the universe, nuclear physics, atomic and molecular physics, astrophysics and solar physics, physics of cosmic rays and cosmic space, and upper atmospheric physics of the earth and other planets.
3. The School has established partnerships with a number of institutions and universities, including the Institute of Physical and Chemical Research (RIKEN), to further enhance education and research opportunities.

## Field of Study: Chemistry

1. Each faculty member works directly with students to carry out research on solutions to unanswered questions.
2. To present their research findings, graduate students make active use of financial assistance for academic conference presentations as well as the Graduate School’s own overseas conference presentation grants.

3. The School offers many classes on topics conducted by faculty members invited from other universities, companies, and research institutes that specifically respond to the demands of the times.

## Field of Study: Mathematics

1. The Graduate Degree Program in Mathematics boasts an outstanding faculty that carries out highly original research and provides students with thorough, high-level instruction from pure mathematics to applied mathematics.
2. As a result of rapid advances in modern mathematics, we have entered an era in which pure mathematics, including number theory and algebraic geometry, are useful in areas of applied mathematics such as cryptographic theory and code theory.
3. The Program strives to ensure that students explore new theories and experience the fundamental profundity and complexity of mathematics.

## Field of Study: Life Science

1. This Program seeks to unravel the mysteries of the similarities and differences between the various phenomena that define life and non-life, as well as what it means to be alive, based on evidence found at the molecular level.
2. The Program is comprised of studies in biochemistry, molecular biology, and biophysics. It maintains a close relationship with outside experts, and engages in cutting-edge research as it broadly explores current conditions in these areas.