The Graduate School of System Informatics collaborates with other universities which have outstanding strength in fields related with system informatics. Concretely, we cooperate with Kyoto University, Osaka University, Nara Institute of Science and Technology, University of Tsukuba, and Nagoya University. The cooperative program offers an opportunity for students to pursue a Master’s program or a Ph.D. program in fields other than those taught in the Graduate School of System Informatics.

The Graduate School of System Informatics targets such a “system” as well as the “system information” that exists within people, living organisms, artificial materials, and the like. It focuses on the systems and methodologies of the pursuit of system informatics.

The Graduate School of System Informatics prepares collaborative divisions with several research institutes in fields at its core and through the integration thereof, the Graduate School strongly promotes education and research related to the theories and methodologies of the pursuit of system informatics.

The term “system” used here does not refer to a so-called information system, but rather to the theories and methodologies of the pursuit of system informatics, which correspond to the development of each academic field, and offers graduate students all over Japan our educational resources of each school are used. Especially, we build and flexibly expand collaborative educational divisions throughout the fields of system informatics. We offer collaborated programs with “Japan Agency for Marine-Earth Science and Technology (JAMSTEC)” that has the outstanding research results using Earth simulator, and “Osaka University Graduate School of Science” which is one of the top 10 universities in the world, “Chuo University Graduate School of Information Science” that is famous for its system informatics study, “Kyushu University Graduate School of System Science” that is strong in fields related with system informatics, “Kanazawa University Faculty of Science” that is strong in fields related with system informatics, “Tokyo Institute of Technology” that is strong in fields related with system informatics, “Gifu University Graduate School of Science and Engineering” that is strong in fields related with system informatics, “Tokyo University Graduate School of Engineering” that is strong in fields related with system informatics, and “Waseda University Graduate School of Science and Engineering” that is strong in fields related with system informatics.

The Graduate School of System Informatics offers Master and Ph.D. programs in Systems Science, Information Science, and Computational Science. Students can participate in a consistent program through their Master and Ph.D. careers. In addition, students in the Computational Science Department specialize in large-scale simulation studies using the power of supercomputers. In particular, high-performance Computational Science, which is a future-oriented discipline, is drawing attention from various fields of science and technology. Our aim is to provide the graduates with the skills and experience necessary to work in the fields of simulation studies using power of supercomputers.

Equally important, we must find and develop highly capable specialists who can work actively in emerging scientific areas or areas combining science and technology contributing to our highly-networked information-based society. In order to comply with such social requirements, we must create an educational environment that is consistent with the advanced research and educational activities in this field and that offers a complex research environment using high-performance computer.

It is my sincere desire to see the applicants for this school playing key roles as the first-ever doctors of computational science in Japan.

Message to applicants who want to study System Informatics

System informatics is an academic field focusing on the advancement of processing and utilization of "system information", which is a significant foundation for the study of a wide range of research areas in the fields of science and technology. The Graduate School of System Informatics offers education and research in fields which contribute to the advancement of processing and utilization of "system information," and offers graduate students all over Japan our opportunities to pursue their academic fields.

Systems Science promotes the idea of a "system," and the "system information" that exists within people, living organisms, artificial materials, and the like. The Graduate School of System Informatics focuses on the development of academic fields related with system informatics, and offers graduate students all over Japan our educational resources of each school are used. Especially, we build and flexibly expand collaborative educational divisions throughout the fields of system informatics. We offer collaborated programs with "Japan Agency for Marine-Earth Science and Technology (JAMSTEC)" that has the outstanding research results using Earth simulator, and "Osaka University Graduate School of Science" which is one of the top 10 universities in the world, "Chuo University Graduate School of Information Science" that is famous for its system informatics study, "Kyushu University Graduate School of System Science" that is strong in fields related with system informatics, "Kanazawa University Faculty of Science" that is strong in fields related with system informatics, "Tokyo Institute of Technology" that is strong in fields related with system informatics, "Gifu University Graduate School of Science and Engineering" that is strong in fields related with system informatics, "Tokyo University Graduate School of Engineering" that is strong in fields related with system informatics, and "Waseda University Graduate School of Science and Engineering" that is strong in fields related with system informatics. The cooperative program offers an opportunity for students to pursue a Master’s program or a Ph.D. program in fields other than those taught in the Graduate School of System Informatics.

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It is my sincere desire to see the applicants for this school playing key roles as the first-ever doctors of computational science in Japan.
The Graduate School of System Informatics of Kobe University was established in April 2010 by reorganizing the School of System Informatics. As a new School, it aims at the advancement of the system informatics studies. Enjoy your studies.

Message to applicants who want to study System Informatics

We are delighted to inform you that the Graduate School of System Informatics of Kobe University is now accepting applications from students who want to study System Informatics. The School offers a Doctor of Philosophy in System Informatics, in Engineering, or in Arts and Science.

The Graduate School of System Informatics is designed to foster experts who can work actively in emerging scientific areas or areas combining multiple sciences. In order to comply with such social requirements, we must create an innovative research environment where boundaries between scientific fields do not exist and researchers are able to be inspired by and combine ideas.

In this future-oriented research environment, the Graduate School of System Informatics will continue to provide a platform for various research activities.

We sincerely request that you consider this opportunity to study System Informatics at the Graduate School of System Informatics of Kobe University. For more information, please visit our website at http://www.sysinf.kobe-u.ac.jp/.

Message from the dean

Dr. Masanobu Yamashita
Dean of the Graduate School of System Informatics
Kobe University

Telephone: +81-78-803-6350
E-mail: eng-kyomugakusei@office.kobe-u.ac.jp

About Graduate School of System Informatics of Kobe University

The Graduate School of System Informatics of Kobe University was established in April 2010 by reorganizing the School of System Informatics. As a new School, it aims at the advancement of the system informatics studies. Enjoy your studies.

Graduate School of System Informatics, Kobe University

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http://www.sysinf.kobe-u.ac.jp/
The Graduate School of System Informatics (DIKU) offers an education program that aims to develop students into computer science professionals with high competence and creativity, and with expertise in soft computing and information systems. The program is designed with the objective of the student obtaining a doctoral degree from the start. Based on a curriculum that complements a Computational Science Intensive Course, the program provides the student with a coherent education from the Master Program on Informatics, where enrollment is based on a comprehensive entrance examination held by five graduate schools of natural science: Graduate School of Engineering, Graduate School of Agriculture, Graduate School of Natural Science and Technology, Graduate School of Science, Graduate School of Education, and the Graduate School of Information Sciences.

The Graduate School therefore actively accepts not only persons who have studied systems technology, information technology, and social sciences, but also those who have a high interest and desire to apply and to expand the scope of these technologies in the wide areas of applications within the natural sciences, humanities, the social sciences, and the technical sciences.

In the Department of Information Science, the student pursues the theories and methodologies related to the social sciences and the humanities, focusing on the quest for science and technology based on a computational approach, and the theories and basic technologies of computational science industrial applications and societal contributions. In the Department of Computational Science, the student explores the domains of information science and technology that are available as an industrial approach. The Department of Information Sciences promotes the development of interdisciplinary research on advanced information science to establish a coherent educational program. The Department of Computational Sciences promotes the development of education in the computational fields in interdisciplinary and interdepartmental research to establish a coherent educational program.

In the Department of Systems Science, the student pursues the theories and methodologies related to the social sciences and the humanities, focusing on the quest for science and technology based on a computational approach, and the theories and basic technologies of computational science industrial applications and societal contributions. In the Department of Information Science, the student explores the domains of information science and technology that are available as an industrial approach. The Department of Information Sciences promotes the development of interdisciplinary research on advanced information science to establish a coherent educational program. The Department of Computational Sciences promotes the development of education in the computational fields in interdisciplinary and interdepartmental research to establish a coherent educational program.

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human resources equipped with practical ability related to high-performance computation as well as highly professional knowledge in various fields of education through collaborations with universities nationwide and short-term, intensive seminars, the course fosters identifying, exploring and resolving problems. a master's thesis, our Master Program makes every effort to cultivate high professionals possessing a broad knowledge in each departmental field as well as an interdisciplinary perspective.

The Graduate School therefore actively accepts not only persons who have studied system technology, information technology, and various fields of each department.

EDUCATION

In the Department of Systems Science, we have developed a structured education capable of training students into advanced knowledge in each field, resulting in an education and research experience capable of fostering advanced engineers and professionals possessing a broad knowledge in each departmental field as well as an interdisciplinary perspective.

In the Department of Information Science, students are equipped with fundamental knowledge in information science, covering a wide variety of theories and engineering, from system infrastructure to integration. As a result, the program provides the student with an education and research quest for science and technology based on a computational approach, and the theories and basic technologies of massive computation in support thereof. As a result, the program provides the student with an education and research experience that will enable him or her to advance toward a computational approach to science and technology.
### Department of Information Science

The Department of Information Science, typically, focuses on the development of a comprehensive understanding of the principles and applications of information and communication technologies. Students engage in research and studies that involve the design and implementation of systems and software, the analysis of data, and the development of algorithms and computational methods. The curriculum is designed to equip students with the skills necessary to tackle complex problems in various domains, such as computer science, data science, and information retrieval.

#### Faculty and Research Topics
- **Database Management Systems**
- **Data Mining**
- **Information Retrieval**
- **Natural Language Processing**
- **Knowledge Representation**
- **Artificial Intelligence**
- **Human-Computer Interaction**
- **Computer Graphics**

### Department of Computational Science

The Department of Computational Science, through its comprehensive courses in advanced computational technology, aims to prepare students for careers in scientific research, engineering, and technology. Students are exposed to a wide range of topics, including computational methods, simulation technology, and data-intensive research. The curriculum includes courses in numerical analysis, parallel computing, and applied mathematics, as well as specialized areas such as computational biology and computational chemistry.

#### Faculty and Research Topics
- **Numerical Software Library**
- **Parallel Algorithm**
- **Application Software Optimization**
- **Master-Worker Programming**
- **Data Analysis**
- **Medical Graphic Process**
- **Medical Bioengineering**
- **Biomodel, Organ Model, Cellular Model**

### Department of Systems Science

The Department of Systems Science focuses on the study of systems, their behavior, and the principles that govern their interactions. Students learn how to analyze, design, and control complex systems in various fields, such as engineering, economics, and social systems. The curriculum emphasizes the development of analytical and problem-solving skills, as well as the ability to apply these skills to real-world problems.

#### Faculty and Research Topics
- **Multiscale Electromagnetic Particle Simulation**
- **Space Environment Simulation**
- **Solar Dynamo Simulation, Geodynamo Simulation**
- **Scientific Visualization**
- **Parallel Algorithm**
- **Application Software Optimization**
- **Master-Worker Programming**
- **Data Analysis**

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**Admission Policy**

The Qualification Test for the Graduate School of System Informatics includes an examination that assesses the applicant’s ability in computer science and mathematics. The test is designed to identify students with strong analytical and problem-solving skills, as well as those who have a background in science or engineering. Applicants must demonstrate a high level of proficiency in these areas to be considered for admission to the Graduate School of System Informatics.
The Department of Information Science offers educational programs that are designed with the objective of the student obtaining a doctoral degree from the start. Based on a curriculum that complements a Computational Science Intensive Course, which provides the student with a coherent education from the Master Program on Computational Science to the Doctoral Program, our Department makes every effort to cultivate high-performance computation as well as highly professional knowledge.

In an effort to aid our students in establishing careers as researchers specialized in computational science, we also have established a Computational Science Intensive Course, which is only in the Computational Science Intensive Program.

The core of our new disciplines is System Information (meaningful information and knowledge in the computer and information system science, the medical, the cultural science, and the social science fields.

In the Department of Computational Science, the student pursues the theories and methodologies related to the computational technology, with a focus on computers, networks, information systems that organically combine computers and human beings, and simulate technologies and social systems with a focus on human imagination and creativity, for the purpose of realizing an education capable of fostering advanced engineers and researchers who can join and lead the international society, both as individuals and in teams.

The Graduate School of System Informatics offers educational research programs through which students are trained not only to analyze, design, construct, and operate systems of increasing size and complexity but also to comprehend the computer and information system science as a whole, covering a Master Program and Doctoral Program for realizing an education capable of fostering advanced engineers and researchers who can join and lead the international society, both as individuals and in teams.
Graduate School of System Informatics prepares collaborative divisions with several research institutes in fields related with system informatics. Concretely, we cooperate with Kyoto University, Osaka University, Nara Institute of Science and Technology, University of Tsukuba, and Nagoya University. The cooperative program offers an opportunity to the theories and methodologies of the pursuit of system informatics.

COLLABORATIVE DIVISIONS AND COOPERATIVE PROGRAM

The Graduate School of System Informatics promotes cooperative activities with several research institutes in fields related with system informatics. The Graduate School of System Informatics of Kobe University cooperates with the Japan Agency for Marine-Earth Science and Technology (JAMSTEC) that has the outstanding research results using Earth simulator, and the National Institute of Informatics (NII) that has the world’s largest scale simulation using the power of supercomputers. In particular, Students in the Computational Science Department specialize in large-scale simulation studies using the power of supercomputers. In particular, Students in the Information Science Department specialize in information science, which is meaningful information that exists within a large-scale, complex system, based on highspeed, large-capacity computing technology. The term “system” used here does not refer to a so-called information system, but refers to the theories and methodologies of the pursuit of system informatics.
The Graduate School of System Informatics cooperates with other universities which have outstanding strength in fields related with system informatics. Concretely, we cooperate with Kyoto University, Osaka University, Nara Institute of Science and Technology, University of Tsukuba, and Nagoya University. The cooperative program offers an opportunity to the theories and methodologies of the pursuit of system informatics.

The Graduate School of System Informatics targets such a “system” as well as the “system information” that exists within people, living organisms, artificial materials, and the like. Rather to a broad “system” covering a variety of areas, from nature and engineering to society, including space, earth, life, and technology, is also indispensable in realizing, maintaining and developing a safe, rich and high-quality life. Excellence in science and technology is also indispensable in realizing, maintaining and developing a safe, rich and high-quality life. Excellence in science and technology contributing to our highly-networked information-based society.

Students in the System Science Department specialize in laying down fundamental theories and methodologies for large-scale complex systems. Students in the Information Science Department specialize in information systems. Students in the System Science Department specialize in information science and technology contributing to our highly-networked information-based society.

Equally important, we must find and develop highly capable specialists from different research fields.

By Taxi
From the JR Nishi-Nihon (Shinkansen) Shin-Kobe Station: About 15 to 20 minutes
From the JR Nishi-Nihon Kobe Line (Tokkaido Main Line) Rokkomichi Station: About 10 to 15 minutes
From the Hankyu Railway Kobe Line Rokko Station: About 5 to 10 minutes

By Bus
From the Hankyu Railway Kobe Line Hankyu Rokko Station (time required: 15-20 minutes)
To "Shindai Honbu Kougakubu Mae" bus stop.
To "Kokusai Bunka Gakubu Mae" bus stop.
To "Shindai Bunri Nougakubu Mae" bus stop.

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Message
Message from the dean
Dean, The Graduate School of System Informatics