

Collaboration

Through industry-academia-government collaboration, we integrate various study fields in design.

The target for “design” is being diversified from products into systems and architectures of society. It is a pressing issue to cultivate human resources who can analyze various problems such as energy issues and disaster control and can “design” comprehensive solutions toward social development. In this program, with four graduate schools/professional graduate schools of Kyoto University as a pillar, close collaboration will be established among domestic and overseas universities, industries, and governments. By integrating various study fields with informatics, we establish a common language in design among experts to create breakthroughs for society.

Wide range of design courses in various disciplines through inter-school collaboration

Kyoto University

- Graduate School of Informatics (Informatics discipline)
- Graduate School of Engineering
 - The Group of Mechanical Engineering Departments (Mechanical engineering discipline),
 - Department of Architecture and Architectural Engineering (Architecture discipline)
- Graduate School of Education, Division of Educational Studies (Psychology discipline)
- Graduate School of Management (Management discipline)

International Collaboration

Overseas/field internship through international collaboration

Japan-UK Research and Education Network for Knowledge Economy Initiatives (RENKEI)

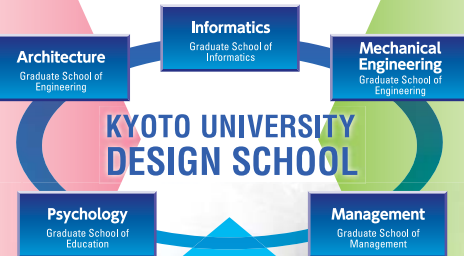
- University of Bristol
- University of London, etc.

Collaboration among design schools

- Stanford University
- Harvard University
- Aalto University, etc.

More universities for exchange

Inter-school Collaboration



KYOTO UNIVERSITY DESIGN SCHOOL

Arts

Inter-university Collaboration

Enhancement of education through inter-university collaboration

- Kyoto City University of Arts
- Graduate School of Fine Arts

Toward Design of Systems and Architecture of Society

Program Coordinator

Toru Ishida

Professor of Graduate School of Informatics

Having gone through the Great East Japan Earthquake, we are strongly aware of the importance of designing social systems and architectures in collaboration with experts from various fields. In our leading program “Collaborative Graduate School in Design” we conduct novel education and research, where we educate experts in Cyber (such as informatics) and Physical (such as engineering) fields to develop their problem finding / solving skills in collaboration with experts in management, psychology, and arts. The *Design Innovation Center*, which is managed by industry-academia collaboration, always makes activities dealing with real world problems open to society. We call whole activities of the leading program open to society “Kyoto University Design School.” From this Design School, we announce our approach to conduct this program with society. We invite graduate students and business people to the world of “design,” where different fields are integrated. Let us pioneer a new academic discipline.

Masatami Takimoto

Chief Executive Officer of
Toyota Central R&D Labs., Inc.



As seen in environmental and energy issues, our society—our planet is facing a period of change and challenge. To solve the complex problems, we need researchers who are experts in their own fields but are also active people with broad viewpoints and knowledge. I believe this program is the first step to cultivate such talent who can take the initiative in creating innovation for solving society’s major issues. I look forward to meet such talents in the near future.

Kazuhiko Yamamoto

Executive Vice President of
Mori Building Co., Ltd.



A city is a complex mixture of various elements. If the mixture is well-ordered, it becomes a good city; if it becomes illogical, it encourages social decay. In city developments such as our Roppongi Hills, good design is required when mixing in the various elements. I hope the students in this program have a dream and become such human resources.

Messages from partners: to Kyoto University Collaborative Graduate Program in Design

Naonori Ueda

Director of NTT Communication
Science Laboratories, Nippon
Telegraph and Telephone Corporation



NTT is making constant effort to realize the information-communication society with its better security and lifestyle. To meet our challenge, high design ability is necessary to create new value and implement it as services for society. I cannot wait to see the young talents from the Design School take the initiative in society.

Tetsuo Shibauchi

Counselor of Nomura
Research Institute, Ltd.



Today’s changes in social and industrial structures have led to the complication and multi-layering of the key issues. It has made the point of the issues unclear. In the future, society needs human resources that have high ability to analyze and delineate the issues. Graduates of the Design School will be exactly the type of person we need, someone who can meet the demands of society.

Ken-ichi Tanaka

General Manager of Advanced
Technology R&D Center,
Mitsubishi Electric Corporation



When creating something new, fundamental design including the surrounding social environment as well as the whole system is very important. Kyoto University Design School offers the opportunity to learn such knowledge through practical studies with global collaboration between business firms and world-famous universities. Education at the school will certainly be useful in the real fields of business after graduation.

Susumu Maruno

Counselors of Advanced Technology
Research Laboratories,
Panasonic Corporation



Panasonic is exerting its best efforts to develop new business fields and new products based on fresh ideas. I am looking forward to the contributions of the so called : “+ shaped people” who will have a high ability to execute and play a significant role in our society by integrating different fields and ideas for global success.

Start new practical training and research at our Design Innovation Center!

Design Innovation Center is located in Kyoto Research Park. We open a *future center*, where in addition to the graduate students, people in industry, governments, and other universities will gather and interact with each other.

Kyoto Research Park

Japan’s first private research park established in 1989 is a base for the generation of new industries and collaboration between industry, academia, and government. It has attracted a total of 250 firms including leading IT businesses.



京都大学
デザインスクール

COLLABORATIVE GRADUATE PROGRAM IN DESIGN

KYOTO UNIVERSITY

Course Work

Courses designed to foster knowledge and ability
for finding/solving real world problems

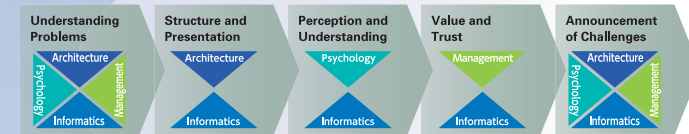
Systematic course design to cultivate holistic view

Our program offers a systematic curriculum consisting of two types of courses: *general design courses* and *domain design courses*. General design courses are an integration of informatics, mechanical engineering, architecture, management, and psychology; Domain design courses are based on each discipline. In general design courses, we cultivate the students' wide perspective and flexible mindset with "cross-disciplinary lectures," where students learn the research methods of different fields, and with "collaborative lectures," where professors in different fields lecture in the same class.

Cross-disciplinary Lecture (example: systematize knowledge of different fields)



Collaborative Lecture (example: professors in different fields lecture in the same classroom)



Field internship utilizing educational aspect of real field

The program offers two types of internship programs: "overseas internships" and "field internships." Overseas internships provide opportunities for exchange and various experiences, while field internships allow students from different disciplines to work together as a team. Through the time spent at other domestic/overseas universities and real fields for problem solving, students will experience the whole process from problem finding to the solution.



+ Shaped People

Holistic View

Creativity

Writing doctoral dissertation

The dissertation is reviewed by the program and the graduate school enrolled in.

Overseas Internship & Field Internship

Leading Research Project (PhD Research)

Domain Design Courses (minor)

Open Innovation Practice

Qualifying examination

Written and oral examinations will be conducted on general and domain design courses.

Domain Design Courses (major)

Field-Based Learning & Problem-Based Learning

General Design Courses

Entrance examination for graduate school in each discipline

Each graduate school will select and recommend candidates from among successful applicants. Students will be selected by written and oral examinations.

Architecture
Graduate School of Engineering

Mechanical Engineering
Graduate School of Engineering

Informatics
Graduate School of Informatics

Management
Graduate School of Management

Psychology
Graduate School of Education

We cultivate "+ Shaped People," who can collaborate with others beyond the boundaries of expertise.

The education of design theory and methodology cultivates students' holistic view.

Also, our continuous practical training and research cultivate their creativity.

Through our consistent education system from master to doctoral course, we will foster "+ Shaped People," human resources that can utilize their expertise in real fields of society.

Academic Research

Program to cultivate the ability of using creativity
to solve various social issues

Lineup of real world problems for developing creativity

In each step of practical training and research, students work on solving real world problems and develop their problem finding/solving skills. Students will conduct doctoral research within the leading research projects by collaboration with businesses and non-governmental organizations, under a supervision of a multidisciplinary advisory committee.

Field-Based Learning & Problem-Based Learning

Build a team with students from different disciplines

Open Innovation Practice

Organize experts from different fields

Practical training 10 weeks

PhD Research 100 weeks

Case examples of leading research project

Explore a new approach in design from the perspective of supporting communication between people/people and machineries.

Sadao Kurohashi

Professor of Department of Intelligence Science and Technology, Graduate School of Informatics



Support of cross-cultural mutual understanding by visualization of multi-language network

We build an environment that supports cross-cultural mutual understanding for the globalized and complex society using the collaborative wisdom of information science, management, and psychology. We design a self-growing automatic translation environment based on a bilingual corpus accumulated by volunteer translators, as well as a statement network visualization environment, which uses an automatic translator to detect relationships between multilingual statements about complex themes.

Highly-accurate automatic translation with bilingual corpus



Collaborate beyond the boundaries of expertise, and challenge to create new systems of environment/landscape/society for better lifestyle.

Teruyuki Monnai

Professor of Department of Architecture and Architectural Engineering, Graduate School of Engineering



Design of urban area for sustainable society

Strategies of "area design," which aims to optimize urban area include the following topics:

1. Ecological environment that is in harmony with natural ecosystem
2. Beautiful landscapes consisting of network of similarities and differences
3. Smart community for optimization of coverage areas for energy, information, and mobility
4. New service using networked local resources in a specific area
5. MICE/tourism strategy, ubiquitous society
6. Creative city as a center of culture, art, science, and technology

We will work on the studies of various kinds of urban areas with a focus on the historical city Kyoto.

Visual simulation of landscape of urban area using 3D computer graphics



Through the design of businesses, services, organizations, markets, and culture, we aim to create innovation.

Yutaka Yamauchi

Senior Lecturer of Graduate School of Management



Exploration of designful services: Learning from the culinary field

To understand "designful" services, we can learn from Japanese restaurants. These services are globally competitive and continue to add high value added. The services offer not only delicious food but also the exceptional experience throughout the service including colorful presentations, traditional rituals and tantalizing anecdotes. Our goal is to develop theories and methodologies for producing such aesthetic design innovations.

Appetizers served at Ryozanpaku, a Japanese restaurant in Kyoto. This perfectly balanced dish is designed to engender various experience for customers.



While disseminating our new approach to urban development from Kyoto, we seek to enhance people's quality of life and the amenity of the area.

Tetsuo Sawaragi

Professor of Department of Mechanical Engineering and Science, Graduate School of Engineering



Affluent society supported by cities and mobility

Using knowledge acquired from mechanical engineering, we simulate and analyze people's activities in daily life. Using model-based control in informatics discipline, we will provide adaptive and flexible life infrastructures. Also, we conduct classification and macro-simulation of driver models from driving data of electric vehicles and perform practical analysis concerning the emergence of people's temporal and spatial characteristics, using a time geographical theory from architecture. Furthermore, from management studies we define the relationship between the low-carbon society and the economy. Through these activities, we will make design social norms towards the establishment of a learning community.



An image of activity support targeting individuals as well as the whole sphere of life