

## Kobe Institute of Computing

### Graduate School of Information Technology

<b>1. Graduate School Code</b>	18	
<b>2. Fields of Study</b>	ICT	
<b>3. Sub Fields</b>	ICT4D (Information and Communication Technologies for Development) <ul style="list-style-type: none"> <li>・ Disaster Prevention</li> <li>・ Education</li> <li>・ Public Administration</li> <li>・ Engineering</li> <li>・ Agriculture (incl. Fisheries, dairy, livestock)</li> <li>・ Science</li> <li>・ Commerce</li> <li>・ Economics / Business Administration</li> <li>・ Medical Science</li> <li>・ Political Science</li> <li>・ Social Welfare</li> </ul>	
<b>4. Degree</b>	<u>Program</u> ICT Innovator Course, Department of Information Systems <u>Degree</u> Master of Science in Information Systems	
<b>5. Standard Timetable (Years needed for graduation)</b>	Learning Japanese for about one year at a designated organization with other JISR participants, then starting the Master course for two years. <ul style="list-style-type: none"> <li>・ 1st year: dedicated to Japanese language study.</li> <li>・ second &amp; third years: full-time Master's Degree Program ( on the premise of passing the entrance exam )</li> </ul>	
<b>6. Language of Program</b>	Master's Degree Program (2nd and 3rd year) (1) Lecture: All lectures are in English. (2) Material: All texts are in English. (3) Seminar: All Seminars are carried out in English.	
<b>7. Desirable English Level and Necessary Academic Background</b>	<u>Linguistic Ability</u> TOEFL IBT: 76, PBT: 540 Or equivalent level in EJU, IELTS, and GRE <u>Academic background</u> At least 16 years of academic background or equivalent (with or without computer background)	
<b>8. Website</b>	<a href="https://www.kic.ac.jp/eng">https://www.kic.ac.jp/eng</a>	
<b>9. Additional Information</b>	Availability	Note
Japanese Language		
(1) The necessity of Japanese language for study	Not necessary for the Master's Degree Program	All information/materials are in English. Faculty members and office staff speak English.
(2) Availability of Japanese language class	Available	<ul style="list-style-type: none"> <li>・ Full-time Japanese language class for the 1st year</li> <li>・ Extracurricular classes for learning Japanese are provided for the 2nd and 3rd year</li> </ul>

Facility Information		
(1) Dormitory available for JISR participants	Not available	Students can get support to find a room for accommodation.
(2) Prayers room or Mosque	Available	Prayer space is available on campus, and there is a mosque nearby.
(3) Halal food available in the cafeteria	N/A	There is no cafeteria in school, but there are Halal restaurants and grocery stores nearby.
Others		
(1) Tutor system	Available	1. We have Japanese and international students who help you as a tutor. 2. We also have full-time office staff who are in charge of taking care of our international students.

## 10. Features and Curriculum of Program

### Acquisition of practical ICT knowledge and skills

To develop skilled professionals, our faculty consists of experienced corporate pioneers from companies such as SONY and Panasonic. They cooperate with various researchers and education experts to instill practical capabilities through group work and simulated projects.

### Development of the ability to discover and resolve issues

For challenges in the real world, various factors complicate progress, and for such problems, you need to have the power to discover their essence. In the curriculum of KIC, you will develop this power through "TANKYU Practice" exercises and "Specific Theme Research".

### Learning international cooperation and social development utilizing ICT

By taking ICT and social development-related lectures and working on solving actual issues besides government-sponsored students from developing countries, it is possible to learn international cooperation, social development, and social innovation

### Part of a global community

KIC is actively developing academic agreements and cooperation with various institutions both in Japan and overseas, to create a rich educational environment that promotes developing advanced ICT human resources, which can be successful internationally.

### Curriculum

Students develop their skills through 'ICT' based subjects and 'Social Development and Innovator System' subjects. Students can combine the knowledge and skills gained through these subjects and apply them to the TANKYU Practice and Specific Themed Research, which lie at the heart of the university.

For each of the issues in the Specific Theme Research, students are required to build and verify a hypothesis for providing new value using ICT technology. The students will also perform a thorough investigation and discuss the results and implications.

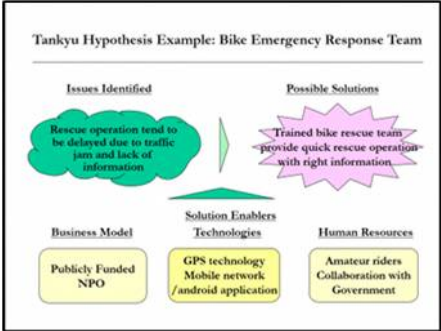
On top of this, students will confirm the uniqueness of their solution by investigating similar solutions and verifying the possibility of realization by investigating income/expense balance through cost simulation. The student's findings are completed as an action plan and written up as a master's thesis.

## 11. Faculty Members

### \* Academic supervisors during the 1st year Japanese training

<p>YAMANAKA, Toshiyuki (Dr./Mr.) Professor</p>	<p><b>Research Subject</b> How to solve social and economic problems in emerging economies through leadership &amp; business innovation</p> <p><b>Special message for the Future students</b> My vision is to contribute to the economic growth in emerging world. When I served in the Ministry of Foreign Affairs, I was posted in Egypt, UK, and Saudi Arabia. After that, I entered the business world and had been engaged in reinventing many organizations and creating new businesses. Through these experiences, I believe that "leadership and innovation" are key to economic and social growth. My course involves not only interactive lecture but also many field trips. I show many cases and practical tips for students.</p>
<p>TAKAHARA, Toshiro (Mr.) Specially Appointed Professor</p>	<p><b>Research Subject</b> SUBJECTS; ICT4D Project Exercise, Social Development SPECIALITY; ICT4D, HCI (Human Computer Interaction), UX (User Experience)</p> <p><b>Special message for the Future students</b> After obtained Bachelor of Visual Arts at Osaka University of Arts, I went to Senegal as JICA volunteer and worked in National Park Service. Since then, I worked with JICA in various African countries such as Niger, Benin and Djibouti. I obtained Master of KIC in 2015, and started working as Special Appointed Professor from December 2018.</p> <p>ICT4D is my main field of interest. We live in a world of a great cultural diversity, and how we can use ICT to live better? To answer this question, we should design a solution by deepening the understandings of our own way to perceive the world, then collaborate with others, share our knowledge to achieve the common goal.</p> <p>By combining various levels of ICT and methods of social development, I am devoted to creating a good service/product design which contributes to making people's life better. Multidisciplinary is the key of the research method.</p>
<p>WANNOUS, Muhammad (Ph.D./Mr.) Associate Professor</p>	<p><b>Research Subject</b> Cloud Computing, Educational Technology (Virtual Laboratories), Crisis Management Technology, Web and Mobile Applications</p> <p><b>Special message for the Future students</b> I have always enjoyed learning new technologies and tried to use them in the most effective way to address real-world issues and problems. An infinite number of problems in all fields are out there. Our mission as IT professionals is to introduce technical solutions to these problems, test our solutions, and improve them. That is the reason for naming my laboratory ∞-lab. Students at ∞-lab have the freedom to work on topics they select. However, the laboratory is engaged in collaborative projects with external partners who seek solutions to their specific issues, and the students can join these projects.</p> <p>I encourage you to take every opportunity to learn new techniques and find new ways of adapting them to solve all kinds of issues that interest you.</p>

## Other faculty members

<p>SUMITANI, Toshiki (Mr.) President of KIC Professor</p> <p><b>Note:</b> <b>President Sumitani is not supervising students.</b></p>	<p><b>Research Subject</b> "Tankyu Practice", Problem Solving, New Business Development, Entrepreneurship</p> <p><b>Special message for the Future students</b> "Tankyu Practice" has been developed by Prof. Toshiki Sumitani, as a method of social innovation and development. It is widely recognized as a valid and effective methodology of solving social issues by an active, action-oriented process. It is used throughout KIC's courses, and also in other schools, e.g. 'i-school' of Tokyo University. All KIC students learn 'Tankyu Practice' to solve social issues with the power of ICT technologies and their own human skills. Note: Prof. Sumitani is not supervising students directly, while every student is supposed to take his "Tankyu Practice" subject.</p>  <p>An Example of "Tankyu" Chart</p>
<p>MARKON, Sandor (Dr./Mr.) Professor</p>	<p><b>Research Subject</b> Interface Technologies, Simulation-Based Optimization, Linear Motor Elevators, Embedded Systems</p> <p><b>Special message for the Future students</b> There is a lot of debate about what kind of IT technology is suitable for application in developing countries. Since numerous companies require commercial software skills (Windows, MS Office, and so on), some people say it is necessary to learn the skills required for those types of software. That is quite correct, but it does not end there. At KIC, students begin with studying the fundamentals of open source software (OSS), for example, Linux, Apache and Android. By acquiring these skills, students are able to become active participants as opposed to passive observers. Instead of simply being 'users' of software developed by other people, students with OSS skills are capable of launching new projects and become 'creators' of new concepts for society. In the future, such students will also be in a position to give guidance on the use of OSS. KIC students themselves can become the seeds for growth in new industries.</p>
<p>SHIMA, Hisato (Mr.) Professor</p> <p><b>Note:</b> <b>Professor Shima is not supervising students.</b></p>	<p><b>Research Subject</b> IoT, Sensor Network, Network Service, Network Security</p> <p><b>Special message for the Future students</b> Information and Communication Technologies are powerful tools to enhance our daily life and industries. IoT (Internet of Things), Sensors are used to correct information from the world. Internet and Web services are used to collect and analyze information. Smart phones are used to provide rich user experiences. My lab is focused on to create actual working solutions using these technologies. Network Security is one of the key issues in implementing network services and its applications. I expect you to become an innovator who solve problems utilizing information and communication technologies.</p>

<p>ITO, Mamoru (Mr.) Professor</p>	<p><b>Research Subject</b> Software Engineering, Project and Program Management, Problem Solving with ICT</p> <p><b>Special message for the Future students</b> Be a professional engineer We can say that professional engineers are those who will grasp market demands properly and realize the demands in a realistic manner. However, It is impossible to satisfy various market demands by their own technical knowledge and skills. It is important for us to share our wisdom and experience with the people of the world and think logically and with flexibility in order to achieve customer satisfaction. Let's work together to aim to be a true professional engineer. Create Innovations If market demand can be clearly defined, we can obtain customer satisfaction by developing products according to the demand. But the market demand is actually becoming vague and ambiguous more and more. It is required by society, not to wait for the requirements of customers but to create new values by innovations that move the customers. ICT is a powerful tool to create innovations. Please join us to create innovations with courage.</p>
<p>OKUDA, Ryosuke (Dr./Mr.) Professor</p>	<p><b>Research Subject</b> Computer Science, Electrical Power Engineering / Electrical Engineering</p> <p><b>Special message for the Future students</b> After 1980s, the invention of Internet enabled a highly reliable communication between computers. The Web based systems replaced many usual services in commercial, government, medical and so on. Although there remains a strict constraint that one must have a computer terminal in order to enjoy those services. The technology expressed in a word as "IoT" (Internet of Things) and "ubiquitous" is the technology which links a thing besides the computer terminal to the internet, and realization of newer service is expected by this. My laboratory mainly studies IoT from the elemental technology to application aiming to achieve new services.</p>
<p>TSUCHIDA, Masayuki (Dr./Mr.) Professor Dean</p>	<p><b>Research Subject</b> MOT (Management of Technology), ICT business development, Value creation utilizing ICT (ICT is Information and Communications Technology such as IoT, AI, etc.)</p> <p><b>Special message for the Future students</b> In a rapid evolution of ICT, Development or learning new ICT is important, and it is also important to help society effectively by using ICT. It is required to create customer values or social values through developing a new business or solving social problems utilizing technologies effectively. It becomes more and more important to understand both technology and business; especially, "ICT" and "value creation". That is (1) value creation utilizing existing ICT, or (2) new ICT development for customers or social value creation. I expect you to think deeply about them and to become a human resource capable of developing a new business or new technologies for society.</p>

<p>LUKUMWENA, Nsenda (Dr./Mr.) Professor</p>	<p><b>Research Subject</b> ICT4D based Services Delivery in Tomorrow Urban, Peri-urban (Cities) and Rural areas for optimal urban and regional planning, design and development with a special emphasis on developing countries</p> <p><b>Special message for the Future students</b> Of all human settlements ever built by mankind, cities have proven to be not only the most versatile and complex structures, but also the most associated with the wealth of nations. Studying cities—reading, analyzing and interpreting them is a critical path to envision the future and its development at one hand, and sustaining the quality of our lives and viability of our living spaces at the other. ICTs afford us an appropriate tool for doing just that, hence my interest in ICT4D. The affordability and affordance of ICTs nowadays make them all the more attractive and appropriate as a tool for development in developing countries. Subscribing to this, I have chosen to focus on ICT4D in relation to services delivery in developing countries cities. Of the many changes we all have seen over numerous decades of development worldwide, services delivery is one that is ever changing as technologies develop and evolve. Coming from a plural background—architectural training, urban design, regional planning and development, practicing, my interest in cities lies in relational aspects of things and their activators (enablers). Relational aspects are associated with societal and cultural factors while activators (enablers) are associable with technologies. Our choice here is ICTs. They are playing an increasingly critical role in our lives— transformational role in our societies and cities, enabling and empowering their users like never experienced before throughout the world. Services delivery is one such area where the impact is so clearly visible, delivery in healthcare, Education, welfare, banking, transportation, to name a few. It is my belief that, through the reading of the city, its analysis and interpretation, using ICTs, students will gain necessary investigative skills allowing them to integrate ICTs into the planning, design processes and/or implementation of future development projects to benefit their countries of origin.</p>
<p>HIRAISHI, Teruhiko (Mr.) Professor</p>	<p><b>Research Subject</b> Requirement Engineering, Software Engineering, Software Quality assurance, Software Process Improvement, Development of embedded software</p> <p><b>Special message for the Future students</b> In today's society, you cannot imagine a life without the system and software. In addition, it is easily supposed that considering the proceeding the IoT, not only for enterprise system engineers, but also for the embedded engineers, scale, complexity, and further quality are required to different dimension level. In our laboratory, we promote the actual project development. Through the project activities, members are expected to know the pleasure of the product development, and to acquire the practical skills. In particular, our laboratory focus on extracting the customer's true demands and seek to build an IT system that is truly useful for society.</p>

<p>YAMANAKA, Atsushi (Mr.) Specially Appointed Professor</p> <p>Note: Professor Yamanaka is not supervising students.</p>	<p><b>Research Subject</b> ICT for development (e-Governance, ICT and ICT enabled private sector development, ICT enabled innovation/incubation, e-waste management, e-education, etc.)</p> <p><b>Special message for the Future students</b> ICT for development is a discipline which I hold very personal. After experiencing how ICT have contributed to the mitigation and recovery of Hanshin Earthquake, I have chosen my professional career as an ICT for Development practioner and have devoted close to 20 years serving various different academic and professional disciplines which includes services. These services include a bilateral Donor Agency, at various different International Organizations, Private Sector organizations, and Civil Society Organizations. I have been supporting, both directly and indirectly, clients from over 100 countries during my career. The experience of witnessing ICT's tangible impacts in the client countries provided me with substantive understanding, real challenges, and emerging opportunities of using ICTs in the developing countries.</p>
<p>TAKEUCHI, Tomonari (Mr.) Visiting Professor</p> <p>Note: Visiting Professor Takeuchi is not supervising students.</p>	<p><b>Research Subject</b> Development Informatics, Project Management, Distance Education, Mobile for Development</p> <p><b>Special message for the Future students</b> When I was an IT teacher in Ethiopia as JOCV (Japan Overseas Cooperation Volunteers), satellite network distance learning system was introduced in high schools all over country by Ethiopian government. It inspired me to work for ICT4D. Then, after I acquired the Master degree in ICT4D in the UK. I worked for many kinds of ICT4D projects in JICA such as ICT infrastructure improvement and various projects utilizing ICT as a tool for development in developing countries. ICT is a powerful tool for development as well as business. However, there are not many experts who understand both Development and ICT. This course provides a valuable opportunity for you to acquire knowledge and skill in the both fields. Such a Master Degree course is very few in the world.</p>
<p>SUN, Yi (Dr./Mr.) Lecturer</p>	<p><b>Research Subject</b> e-Learning, Education Technology, ICT Engineering Education, Human-Computer Interaction, Text Analysis, Web/Mobile Application, Computer Science</p> <p><b>Special message for the Future students</b> In recent years, ICT has made great progress. How to use ICT to solve the societal issues are a good challenge for developing countries. In my lab, we focus to the Education area, try to find the ICT solution for the real education issues. In the research process, we need to understand the core of the problem, and use various methods and ICT tools to approach a clear solution. Please keep your mind free and open, let us to research the real solution using ICT.</p>

## 12. Academic Schedule

### (1) Studying Japanese Language Program (1st year)

Learning Japanese for about 1 year at an designated organization with other JISR participant.

### (2) Master's Degree Program (2nd and 3rd year)

A school year of the graduate school has 6 terms; each term is about 2 months.



## [Outline of the Academic Calendar]

### Entry in October

Year	Term	From	To
Master's 1 <sup>st</sup> year (2 <sup>nd</sup> )	Fall 1	October	November
	Fall 2	December	January
	Fall 3	February	March
	Spring 1	April	May
	Spring 2	June	July
	Spring 3	August	September
Master's 2nd year(3 <sup>rd</sup> )	Fall 1	October	November
	Fall 2	December	January
	Fall 3	February	March
	Spring 1	April	May
	Spring 2	June	July
	Spring 3	August	September

### Complete in September

## 13. Facilities and Cultural Activities for International Students

### (1) Student Dormitory

KIC does not have dormitories on campus, but the students can get support to find a room for accommodation. The current KIC students enjoy staying in a public dormitory / in a private rental apartment.

### (2) Japanese Language Program

Adding to the one year studying Japanese language program, non-credit Japanese Language classes will be provided during Master's Degree Program (2nd and 3rd year).

### (3) Others (Healthcare center, Counseling Support, Homestay Program, Cultural Tour etc.)

From enrollment through graduation, specialized staff will provide comprehensive support for international students.

## 14. Information on Job Placement Assistance Service for International Students

KIC provides information on job opportunities for the international students in Japanese.

## 15. Message for JISR applicants

The ICT Innovator Course is a cutting-edge graduate program we are proud of and already boasts an excellent track record. Our faculty is comprised of what could be described as the best line-up of lecturers in the field. Our vision is to see KIC nurture as many future leaders as possible.



The principal nature of this world is diversity: many different cultures and various way of thinking. ICT can connect all these people and it enables us to live together. But the principal actor is always human, as well as the subject to learn. Let's make a breakthrough to the status quo of common sense by questioning why and search a better way to make a good change. Only human interaction and dialog make this possible. It is an intellectual adventure.

- **Basel Mohamad Alebrahim (Syria)**

I graduated with a Bachelor degree in Informatics Engineering from Aleppo University, Syria. After three years of experience in many projects, I perceived that I need to expand my technical knowledge of information systems and turn my focus towards their wide-scale applications.

Throughout life, my ambition was to do my master study in a developed country such as Japan.

Fortunately, my ambition has become a reality when I got a scholarship through JICA program in 2017. Because I want to deepen my previous Education in Informatics Engineering, studying in a master course at KIC is the perfect choice.

At KIC, I do research work in Infinity Lab supervised by Dr. Muhammad WANNOUS. Infinity Lab basically focuses on the use of Cloud Computing Web and Mobile Technologies to conduct research activities.

My research is about the utilization of virtualization and cloud computing for Construction of a Virtual Computing Laboratory (VCL) to support Computer Science Courses in Syrian Higher Education.

KIC is located between the Rokko Mountain and Kobe port. Kobe is a prominent city with a great climate and environment. People of Kobe are very friendly, and there are many foreigners from all over the world which makes the environment more enjoyable and enables the multicultural exchange.

- **Yaman Sanobar (Syria)**

It is really welcome if you join KIC.

Although KIC is not that big university, it has a positive and motivating environment, has amazing people and it is culturally rich. Moreover the outcome you get from KIC is determined by your given efforts so my advice to you is to do your best and stay energetic.

I sincerely hope we will meet you in Japan.