

# Why Japan?

apan, a mountainous island country located in the northwest Pacific Ocean off the East Coast of the Asian Continent, is one of the safest and most urbanized countries in the world. Surrounded by the sea and brimming with nature, Japan is an economic powerhouse where the beauty of each season coexists with modern technology.

Japan has made significant contributions to contemporary science and technology, notably in the field of robotics, nanotechnology, and medical science. Japan's primary industries are automobiles, consumer electronics, and computers, making Japan a great place to learn engineering.

Culturally, Japan is renowned for its popular culture, particularly its manga, animation and video games. Japan is also home to many world-famous cuisines.

With 24-hour convenience stores, punctual public transportation, and an excellent healthcare system, international students will discover that Japan is an incredibly comfortable place to live and study.

▶ Population: 11<sup>th</sup> in the world

125.5 million

(stat.go.jp, as of 2022)

Land area: 8<sup>th</sup> in Asia 380,000 km²

► Gross national income: the 3<sup>rd</sup> highest in the world

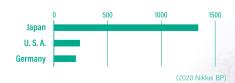
(mofa.go.jp "World Statistics" 2021)

## 3 Things You Need to Know About Japan

## **▶** Longevity

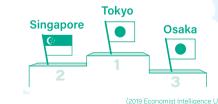
Japan is known as the country with the longest average life expectancy in the world. This is because the public medical system is well-organized and everyone has access to advanced medical care. But it is not only the people who live long. Japan has the largest number of companies in the world that have been in business for more than 200 years. The oldest company has existed for more than 1,400 years. This means that many Japanese companies have general wisdom, while retaining the ability to adapt and survive in new times like no other country.

Number of companies in business for more than 200 years



## ▶ Safety

Japan is renowned as a safe country, and Japan's cities consistently rank as some of the safest cities in the world.

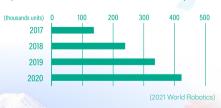


Speaking of safety, Japan is also known for the high quality of its industrial products. Japanese are frequently featured on lists of the world's safest cars, account for more than 30% of all vehicles.\*

## ► Hi-Technology

Japan is the world's number one industrial robot manufacturer. 45% of the robots operating in factories around the world are made in Japan. The global robotics market is expanding every year. Japan's high-tech industry is expected to continue to grow and will require a large number of engineers in the future.

Operational Stock of Industrial Robots - Japan



# Why Kyoto?

yoto is located on the main island of Japan and was the capital of Japan for more than 1000 years of its 1200-year history. Today, that beautifully preserved culture coexists alongside a vibrant student community and a unique technology industry that has grown up between the thousands of shrines and temples that dot the city.

Motors, robots, video games, and health care equipment are just a few of the products that Kyoto now produces alongside lacquerware, tea and silk kimono.

At KUAS, we seek to master the knowledge of the past and the technologies of today to nurture our students into diverse, world-class citizens and engineers.

Geographically speaking, Kyoto City is the perfect size if you want to go to school in the city. The entire city is accessible by bicycle, and the price of living is more affordable than nearly all other major cities in Asia. On the other hand, Kansai International Airport (KIX) is only a short bus ride away, making it a comfortable and accessible place for international students to live.



4 Reasons to Study in Kyoto

**▶** International

14,000



► Academic

The highest student-to-population ratio in Japan

**▶** Innovative

12
Novel laureates



## Industrial



A hub of world-famous high-tech industries and the 3rd best startup ecosystem in Japan (startupblink.com)

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# Why KUAS?

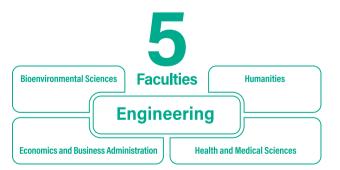
**Kyoto University of Advanced Science** (KUAS) is an accredited private university which was founded in 1969 in Kameoka City in the west of Kyoto Prefecture. In addition to this, KUAS has recently established a new campus in Uzumasa, Kyoto City. In 2019, to commemorate its 50th anniversary, the name of the university was changed.

Furthermore, in April of 2020, KUAS established the Faculty of Engineering where students can learn the most advanced technologies through a practical study program. At KUAS' Faculty of Engineering, students will be able to study a wide range of engineering fields and prepare themselves to compete on the global stage.

Top-tier professionals who can create useful innovations for the future are in high demand all over the world. KUAS will provide its students a professional and practical education to help them grow into leaders of innovation and ensure that they are capable of taking on the diverse challenges that society faces.



KUAS has two campuses in Kyoto; one in Uzumasa and another in Kameoka. Each of these campuses has unique characteristics and facilities, allowing KUAS students to get the full college life experience.



With the addition of our new Faculty of Engineering, KUAS was reborn into an active contributor to essential academic and economic fields. All five faculties will play key roles in addressing the current and future needs of society.

Faculty	Engineering	Economics & Business Bioenvironmental Administration Sciences		Humanities	Health & Medical Sciences	
Course of Study	Department of Mechanical and Electrical Systems Engineering	Department of Economics     Department of Business Administration	Department of Bioscience and Biotechnology     Department of Bioenvironmental Design     Department of Agriculture and Food Technology	Department of Psychology     Department of History and Cultural Studies	Department of Nursing     Department of Speech     and Hearing Sciences and     Disorders     Department of Health and     Sports Sciences	
Graduate Program	Graduate School of Engineering	Graduate School of Economics     Graduate School of Business Administration	Graduate School of Bioenvironmental Sciences	Graduate School of Human Culture		
•	[√] UZUMASA	[ V ] UZUMASA	[ ] UZUMASA	[ V ] UZUMASA	[ V ] UZUMASA	
Campus	[ ] KAMEOKA	[ ] KAMEOKA	[ √] KAMEOKA	[ ] KAMEOKA	[ √] KAMEOKA	
Language of Instruction	ENGLISH	JAPANESE	JAPANESE	JAPANESE	JAPANESE	

\* New English programs for international students by the Faculty of Bioenvironmental Sciences and the Faculty of Economics and Business Administration will open in 2025.

What is KUAS Engineering?

Be a Street-Smart Global Engineer

features an engineering program with close ties to the manufacturing industry in a country that is globally acclaimed for its engineering ingenuity. The KUAS Faculty of Engineering represents an all-new, all-English model for engineering education in Japan.

The Faculty of Engineering was established in April 2020 with a team of internationally distinguished faculty members and active professional engineers. Focused on the technology that will help shape our future-electric vehicles, drones, robots, AI, machinery, motor-related solutions, power generation systems, and much more—KUAS is now welcoming the world's next generation of engineers to Kyoto.

To create state-of-the-art technology, it is essential to provide state-of-the-art education. That is why the ultimate goal of KUAS' engineering program is to provide students with the immediately applicable real-world skills that will allow them to excel in the modern world of engineering.

From an engineer's perspective, Kyoto provides a uniquely stimulating environment for building a career. Kyoto is known as a city of industry where globally top-performing mechanical and electronics companies keep their headquarters. Specializing in the fields of mechanical, electrical, and mechatronics technology, the KUAS Faculty of Engineering offers an outside-in approach that considers the current trends of the industry, allowing students the opportunity to work with real engineers in Kyoto's full-fledged manufacturing industry.

> At KUAS, Faculty of Engineering students engage with real companies and explore a landscape of career opportunities available in Japan and beyond before they even graduate. Meanwhile, KUAS ensures that this industry involvement allows students to springboard into exciting careers after graduation. This is possible because of the many world-leading engineering firms based in Kvoto.

Department of Mechanical and Electrical Systems Engineering

Bachelor's Program 4 years



## **KUAS Engineering** in Numbers



The KUAS Faculty of Engineering officially opened in April of

2020 with a brand new faculty building.

KUAS offers the first multidisciplinary all-English Faculty of Engineering in Japan.





overseas, and KUAS has set a goal to create a campus community that is 50% international students by 2024.

## **Engineering Students by Nationality (2022)**



## 4 Pillars

## All-English

engineering program located



## **Intensive Japanese** language courses

language courses to broaden their future career paths at no



## A strong, practical program

engineering courses, uniquely prepare students for



## **Exceptional career** opportunities

seeking careers both in Japan and internationally by utilizing its strong industry ties and professional advisors.







Enrollment



**Undergraduate Program Academic Curriculum** 

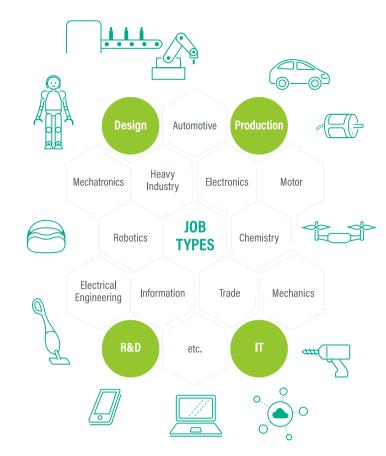
■ J UAS' Faculty of Engineering offers a high degree of flexibility in specialization so that students can have exposure to a wide range of knowledge and gain expertise in the various sub-disciplines necessary for professionally balanced engineers.

With this systematic, multidisciplinary program that crosses 13 fields, students can acquire collaboration skills, practical problem-solving skills and a global perspective.



## **Mechanical and Electrical Systems Engineering**





## **Course Models**

### **Electric Vehicles**

### Faculty-wide Courses

- Electromagnetic Theory
- Electromagnetic Theory Exercise
- Fundamentals of Electric Motors
- Control Principles of Electrical Motors
- Introduction to Electrochemistry
- Introduction to Battery Engineering
- Semiconductor Engineering
- Power Electronics Engineering Actuator Systems
- Electric Circuits
- Analog Electronic Circuits
- Introduction to Sensors
- Introduction to Scientific Measurement
- Electric Power Transmission and

## 

- Exercise for Machine Shop Practice
- Mechatronics Laboratory (Robot: basic)
- Mechatronics Laboratory (Energy)

### Comprehensive Practical Exercises

- Pre-Capstone Project 1&2
- Capstone Project 1&2

## **Robotics**

### Faculty-wide Courses

- Introduction to C Programming
- Introduction to C Programming Exercise
- Logic Circuits
- Introduction to Mechanisms and Mobile
- Introduction to Robotic Manipulators
- Introduction to Scientific Measurement
- Digital Control Engineering
- Classical Control Engineering
- Modern Control Engineering
- Introduction to Sensors - Analog Electronic Circuits
- Actuator Systems
- Electric Circuits
- Fundamentals of Electric Motors

- Exercise for Machine Shop Practice
- Mechatronics Laboratory (Robot: basic)
- Mechatronics Laboratory (Robot: adv.)

## Comprehensive Practical Exercises

- Pre-Capstone Project 1&2
- Capstone Project 1&2

	= mandatory subjects	1 <sup>st</sup> seme	ester	2 <sup>nd</sup> seme	ester	3 <sup>rd</sup> sem	ester	4 <sup>th</sup> sem	nester	5 <sup>th</sup> semester	6 <sup>th</sup> semester	7 <sup>th</sup> semester	8 <sup>th</sup> semeste
GREY =	electives		Term break (Feb & Mar)		Term break (Aug & Sep)		Term break (Feb & Mar)		Term break (Aug & Sep)	5 Seillestei	o semester	/ Semester	o semesu
	Future Design Courses					Future Design		Future Design		Future Design			
(	Civic and Liberal Arts Courses					Civic and Liberal Arts		Civic and Liberal Arts		Civic and Liberal Arts		Co	urses C
	Japanese Language Courses	Basic Kanji and Vocabulary I     Basic Listening and     Conversation I     Basic Reading I     Basic Writing I     Basic Grammar I	Basic Kanji and Vocabulary II     Basic Listening and Conversation II     Basic Reading II     Basic Writing II     Basic Grammar II	Adv. Kanji and Vocabulary     Adv. Listening and Conversation     Adv. Reading I	Adv. Reading II     Adv. Writing	Comprehensive Japanese I     Business Japanese I     Newspaper Reading	Comprehensive Japanese II     Business Japanese II     Research Paper Reading					Spe	rsity-wide cialized otal: 12
	Startup Courses	- Startup Seminar		- Startup Seminar					:				
	Career Education Courses					• Career Design			Internship     Overseas Training     Service Training				
	Sports Courses	Sports and Life skills		Sports and Life skills	:	Sports and Life skills	:		:				Sports and Life skills
	Faculty-wide Courses	Introduction to Mechatronics Engineering Engineering Physics 1     Exercises     Calculus and Linear Algebra 1     Exercises     Information Literacy     Introduction to Numerical Analysis Programming		Engineering Physics 2     Exercises     Calculus and Linear Algebra 2     Exercises     Algorithmic Thinking and Programming with Python     Exercises		Ordinary Differential Equations     Exercises     Introduction to C Programming     Exercises		Vector Calculus     Exercises     System Programming with C     Exercises		Fourier Analysis and Partial Differential Equations     Exercises     Digital Signal Processing     Exercises	Complex Analysis, Probability and Statistics     Exercises	• Intellectual Property	
	Pillar-specific Courses			Fundamental Mechanics     Exercises		Mechanics of Materials     Exercises     Electromagnetic Theory     Exercises     Fundamentals of Electrical Motors		Machine Design     Exercises     Intro to Mechanisms and Mobile Robots     Classical Control Engineering     Introduction to Physical Chemistry     Exercises     Control Principles of Electrical Motors     Semiconductor Engineering     Electric Circuits		Introduction to Production Engineering     Introduction to Robotic Manipulators     Introduction to Scientific Measurement     Modern Control Engineering     Introduction to Electrochemistry     Power Electronics Engineering     Analog Electronic Circuits	Introduction to Sensors Digital Control Engineering Introduction to Battery Engineering Actuator Systems Electric Power Transmission and Distribution Logic Circuits Introduction to Communication Engineering	Electric Power Generation and Transformation     Introduction to Information Engineering	
	Experiments & Laboratory Exercises			- Introduction to Design		Exercise for Machine Shop Practice		Mechatronics Laboratory (Robot: basic)		Mechatronics Laboratory (Energy)	Mechatronics Laboratory (Robot: advanced)		
	Comprehensive Practical Exercises							Pre-Capstone Project 1		Pre-Capstone Project 2	Capstone Project 1     Laboratory Project 1	Capstone Project 2     Laboratory Project 2	

\* Exact curriculum and course names subject to change This curriculum map represents the planned curriculum for students enrolling in the fall

## **4** Stones Project

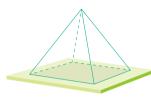
▼ UAS encourages students to gain hands-on experience in four projects to become street-smart global engineers. Students can start their own projects and compete in various competitions, or work with real companies to tackle

industrial challenges. By cultivating creativity and flexible thinking, students will be able to play an immediately effective role in society after graduation. This practical training is the essence of KUAS Engineering.

## **Flagstone**

Anytime

**Extracurricular Activity** 



A "flagstone" is a paving stone that is often used in building roads and paths. The Engineering Building at KUAS provides the perfect environment for prototyping little ideas. Whenever something inspires a student to create something, they are free to formulate a project and start creating. For example, students can make electronic circuits in the Electronic Workshop and make bodies using 3D printers in the Science Plaza, and assemble them to build small robots or drones. Faculty members and instructors who are experts in various fields will also support students in these endeavors.



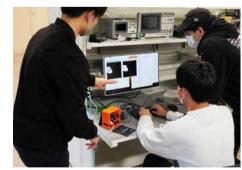
## **Cornerstone**







A "cornerstone" is a foundational building block and an essential part of architecture. For students who want to take on a long-term, large-scale team project, KUAS offers the cornerstone project. Faculty quidance and equipment are available, as well as project funding. The cornerstone project allows students to work on a full-scale engineering project while still in school, developing and executing their project within a limited budget and time.





One of the cornerstone projects launched by the first group of students is Akikomi. Akikomi is a classroom surveillance system developed in response to the need for "social distancing" during COVID-19, so that vacant classrooms around campus can be found easily and remotely. This innovative system focusing on an important social issue won the undergraduate prize in the Student Research Competition at the 2020 IEEE International Conference on Teaching, Assessment and Learning for Engineering (TALE).





## **Keystone** (Pre-capstone)

4-5th Semester

Mandatory Subject



A "keystone" is the important wedge-shaped stone at the top of an arch. The keystone project is also referred to as the pre-capstone project\* and is the first step towards a career as a full-fledged engineer. Students work in teams to solve problems provided by partner companies with the support of faculty and industry professionals. Through this experience, students improve their teamwork and communication skills while deepening their understanding of the abilities and knowledge they need to acquire.



## **Capstone**

6-7th Semester

Elective Subject



A "capstone" is the last stone placed on the top of a pyramid. The capstone project is the culmination of the KUAS engineering program and is even more of a challenge than the keystone project. Students must dive deep into real problems, analyze them to reveal the hidden points that need solving, propose a creative idea, and implement that idea in the field by repeating the prototypingimproving-verification steps. Through this industry experience, students can develop the ability to recognize social issues and solve them by applying the skills and knowledge they have obtained throughout their education.



## ▶ Choose a company



KUAS has partnered with more than 50 companies to provide our students with challenges. Students can choose the challenge they want to take on from companies like machinery manufacturers, electrical equipment manufacturers, semiconductor equipment manufacturers, and more.

## ▶ Get out in the field



### "The key to the solution is in the field!"

Visit companies and learn about the background of the problems they are tackling. Then, craft a plan to reach the finish line with your teammates.

## ► Analyze and prototype



Modern manufacturing is a combination of complex technologies. A variety of ideas and creative innovation are needed to accomplish goals. Discuss your solution with lecturers and corporate engineers and create prototypes in our workshop.

## ▶ Improve



Refining an idea from multiple perspectives is key. Students will need to procure materials and parts as well as inspect deliveries. Processing, assembly, preliminary testing, main testing, data collection, data analysis, result analysis, and summarizing are all tasks that students will need to master

### ▶ Propose



After lots of discussion, analysis and modifications, you will complete your project by delivering a proposal to professionals at a real company. If your proposal is accepted, it may be integrated into an actual product!

### **Partner Companies**

ANIMO Limited ASAHI Co., Ltd. CASTEM Co., Ltd. Deloitte Tohmatsu Consulting LLC DFC Co., Ltd.

FUKUSHIMA GALII FLCo. Ltd. ITK Engineering GmbH I-PEX Co., Ltd. KUNIMOTO Co., Ltd. MATSUI MFG, Co., Ltd.

MICRONIX corp. Nakasaku Co., Ltd NANTSUNE Co, Ltd.

NSW Inc. Pentalink Inc Pittan Inc. SANYO METAL Co., Ltd. Nidec Corporation SCREEN Holdings Co., Ltd. NIDEC OKK Corporation

Sewa International LLC Shimadzu Corporation Techfirm Inc. Techno Takatsuki Co., Ltd. **TOWA Corporation** 

## **Graduate Programs Academic Curriculum**

he Kyoto University of Advanced Science Graduate School of Engineering seeks to face the rapid structural reforms in society and industry head-on. At KUAS, our faculty and staff seek to nurture engineers with superior skills and knowledge so that they can become the next century's leaders in science and technology.

All graduate engineering students at KUAS belong to a research laboratory and learn in an "on-the-iob" environment under globally active professors and industry professionals.

This method, matched with cutting-edge facilities, is ideal for developing students into specialists in fields including power control systems, devices, motors, and more.

The KUAS engineering graduate programs aim to transcend conventional methods and transition to a comprehensive approach where students establish new systems and concepts based on multiple ideas from different academic disciplines. The program of the KUAS Graduate School of Engineering is based on the four fields of materials, energy, information and systems, with each research field correlating and overlapping with the others. Students can seek expert advice from specialists outside their own field, which can lead to new ideas. Students can learn how to innovate professionally while expanding their integrated knowledge beyond the boundaries of their major. At KUAS, it is our mission to nurture these comprehensive thinkers and enable them to create new technology platforms for decades to come.

## Master's Program:

Students can gain advanced knowledge and expertise in areas such as electrical, electronic, mechanical, and electrochemical engineering, all of which are indispensable to future professionals working in electromechanical fields.

Cour	Courses		
Scientific	4		
Specialized	Core	8 or more	
Specialized	Advanced	6 or more	
Research	(incl. Exercise)	16	
Tot	34 or more		

<ul> <li>GREEN = mandatory subjects</li> </ul>		mandatory subjects						
• GREY = electives			1 <sup>st</sup> semester	2 <sup>nd</sup> semester	3 <sup>rd</sup> semester	4 <sup>th</sup> semester		
Language	e Sci. English		Scientific English	Scientific English				
			Adv. Mechanical Electrical System Engineering	Adv. Mechanical Electrical System Engineering				
Core	Materials		MEMS Technology and Materials	- Physics and Chemistry of Electronic Materials				
Specialized Courses	Energy		Wind Power Technology					
	Informatio	n		- Computer Math for Graduate Engineers				
·	Systems			Advanced Robotics				
	Materials					Advanced Computational Materials Science		
Advanced Specialized	Energy				Computer-Aided Design of Semiconductor     Power Devices & Modules	Enabling Tech. of Solid-State Power Conversion		
Courses	Informatio	n			Scripting Language and Virtual Machine			
•	Systems				Remote Sensing	Theory of System Design		
	Fundamental Re	search	Advanced Exercise	Advanced Exercise	Advanced Exercise	Advanced Exercise		
Activity Practical Re		arch	- Advanced Research	- Advanced Research	- Advanced Research	- Advanced Research		

<sup>\*</sup> Exact curriculum and course names subject to change

## **Doctoral Program:**

Students will acquire greater competency in developing their problem-solving skills based on a variety of academic trends and demands from society while also gaining a sophisticated understanding of and expertise in the field of electromechanical systems.

Courses	Credits		
Scientific English	4		
Specialized	8 or more		
Research Activity	24		
Total:	36 or more		

GREEN = mandatory subjects     GREY = electives							
		1 <sup>st</sup> semester	2 <sup>nd</sup> semester	3 <sup>rd</sup> semester	4 <sup>th</sup> semester	5 <sup>th</sup> semester	6 <sup>th</sup> semester
Language	Sci. English		Scientific English		Scientific English		
	Materials	MEMS Technology and Materials	Physics and Chemistry of Electronic Materials     Advanced Computational Materials Science		Advanced Lecture of Mechanical and Electrical Systems (Materials Science)		
Specialized	Energy	Wind Power Technology     Computer-Aided Design of Semiconductor Power Devices and Modules	Enabling Tech. of Solid- State Power Conversion		Advanced Lecture of Mechanical and Electrical Systems (Energy Engineering)		
Courses	Information	- Scripting Languages and Virtual Machines	- Computer Math for Graduate Engineers	Advanced Lecture of Mechanical and Electrical Systems (Information Engineering)			
	Systems	- Remote Sensing	Theory of System Design     Advanced Robotics	Advanced Lecture of Mechanical and Electrical Systems (System Engineering)			
Research Activity	Fundamental Research	- Advanced Exercise	Advanced Exercise	Advanced Exercise	Advanced Exercise	Advanced Exercise	Advanced Exercise
Courses	Practical Research	Advanced Research	- Advanced Research	- Advanced Research	- Advanced Research	- Advanced Research	- Advanced Research

Dr. Nakamura

Dr. Horii

Dr. Imai

Dr. Namazu

Dr. Matsumoto

well as medical technology.

Dr. Tabata

Dr. Kawakami

Dr. Piumarta

Dr. Liang

Dr. Sera

Dr. Nishi

**Sleep Disorders** 

••••••

**Measuring Stress Abnormalities in** 

Dr. Liang combines state-of-the-art

wearable optical brain imaging technology with advanced

big data analysis methods to measure brain activity during

sleep and search for stress-related abnormalities. Although

the causes of stress-induced sleep disorders and the

areas of the brain that need to be treated is

essential for people to live healthy lives.

it is difficult to measure invisible phenomena, elucidating

the Brain to Determine the Causes of

Elucidating the physical properties and functions of nanomaterials invisible to the naked eye with our proprietary technology

Dr. Namazu's research focuses on measuring the strength of objects several nanometers in size and exploring the new properties that emerge when materials are nanosized. These are supported by his one-of-a-kind experimental techniques that integrate micro-machines and electron microscopes. These world-class proprietary technologies enable us to skillfully manipulate microscopic objects and contribute to the next generation of semiconductor and automotive industries as

Dr. Castellazzi

Dr. Takahashi

Dr. Kishida



Increasing the efficiency of motors used in electric vehicles and drones will reduce the consumption of fossil fuels and prevent global warming, Dr.

Kucuk's laboratory aims to develop high-efficiency motors using new materials and smart control technology,

as well as compact and efficient generators that enable low-cost power generation from renewable energy sources.



Dr. Oki

Dr. Fukushima

Dr. Salem

Dr. Nisar

Dr. Sato

## Developing robots to make online technology safer and more accurate

Dr. Nisar is conducting research in preparation for the spread of "on-line

control surgical robots. Dr. Nisar's laboratory is developing a VR environment to train users to handle surgical robots, and



and development of wearable robots that enable advanced robotic control surgery," in which surgeons will remotely

a robotic glove that provides a sense of touch to its wearer, which is important during surgery but has been difficult to achieve until now.

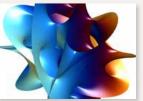




The professors teaching at KUAS are specialists in a diverse range of fields. The above are just a few examples. To learn more, please visit the official KUAS website and explore the Faculty and Research page.









## **Faculty**



## Dean's message

The Engineering Program at the Kyoto University of Advanced Science is the one and only program in the world that provides you with the opportunity to become a "Street-Smart Global Engineer"!

The features of our program include: cultural diversity with students from over 40 different countries across the world, cross-disciplinary engineering learning, and a capstone project to tackle real-world problems that advanced Japanese companies are facing. The university life here will be tough, but I promise it will be an invaluable and unforgettable experience for you. I heartily encourage you to join us and realize your dreams and aspirations. Then, nurture those dreams into reality, and use them to carve a future of your own.

Your future is here, and YOU are the future.



Dr. Osamu Tabata MEMS, NEMS, DNA



Dr. Ippei Kishida Computational Materials Science Battery Engineering, Ionics



Dr. Ryosuke Matsumoto Solid Mechanics, Computational



Computing, Personal Informatics



Dr. Alberto Castellazzi



Dr. Kazuo Oki



Dr. Salem Ibrahim Salem mote Sensing, Water Resources and



Dr. Hirotsugu Matoba



Dr. Fuat Kucuk



Dr. Koichi Nakamura Quantum materials science



Dr. Shigeru Horii Materials Science, Solid-state



Dr. Satoru Emura adaptive signal processing and



Dr. Hiroaki Fukushima



Dr. Martin Sera Mathematics, Complex Analysis,



Dr. Tadayuki Imai Optoelectronic Devices, Optical



Haptics, Flexible Manipulators



Dr. Hiroshi Kawakami



Dr. Masayuki Nishi Inorganic Material Chemistre



Dr. Takahiro Namazu

**Eunctional Materials** 

Nanomechanics, Nanotechnology,



Dr. Ryo Takahashi

Electrical Engineering, Information and Communication Engineering, Statistical Physics

Dr. Yoshihiro Sato Robotics, Computer Vision, VR/ME

## Career

## **Career Design Program**



KUAS seeks to nurture all of its students into young professionals who can act independently to achieve their goals.

We provide numerous opportunities to communicate with companies and business professionals in order to help our students obtain the skills necessary to adapt to a changing world and find purpose in their future careers.

KUAS also offers active-learning style classes to prepare students for job hunting in Japan. This program helps students to grow their understanding of Japanese culture and industry. In addition, we empower students to develop a recognition of the skills and abilities they have gained during their student life. and how they relate to being a professional in Japan. Finally, KUAS encourages students to engage in self-exploration while building their careers with the assistance of our professional career development staff.

## **Internship Program**



KUAS works with companies both within Japan and abroad to offer internship programs specifically designed for our students. More than 100 Japanese and 30 overseas companies offer internships to KUAS students, allowing them to gain experience in a wide variety of industries.

Participating in an internship program and acquiring knowledge of the real world will give students a great advantage in finding their own specialties in

\*As of 2022

## **Partner Universities**

KUAS promotes innovative research programs through partnerships with many of the world's leading universities. The following universities are KUAS research partners.

## Europe

### Serbia

University of Novi Sad

### Austria

- Graz University of Technology
- University of Graz

### Germany

- Technical University of Dortmund
- University of Freiburg

## Sweden

Södertörn University

### France

- ESIEE Paris
- National Polytechnic Institute of Toulouse
- ENSTA Bretagne

- University of Macerata
- University of Naples Federico II

## Asia

### South Korea

Seoul National University

## China

Zhejiang University Taiwan

## National Cheng Kung University

Vietnam

### Foreign Trade University India

NITTE (Deemed to be University)

## Oceania

University of Technology Sydney

North America

- University of Hawai'i at Manoa

Worcester Polytechnic Institute

- University of California, Irvine

**United States** 

Tufts University

Ohio State University











UAS is located on two campuses: the new Uzumasa campus, which is easy to commute to from Kyoto City, and the vast Kameoka campus, which is located in the mountains of western Kyoto Prefecture. Uzumasa campus hosts KUAS' new, hightech Engineering Building alongside an International Student Dormitory, two libraries, a bookstore, and more. Meanwhile, the Kameoka campus houses many sporting facilities such as tennis courts, a gym, and a baseball field. Both campuses feature convenience stores and cafeterias with lots of healthy, affordable meals.

All students are free to travel between campuses to study, socialize, exercise, and participate in extracurricular activities.

## **Main Club Activities**

- American Football
- Karate
- Kyudo
- Kendo Baseball
- Soccer
- Judo
- Powerlifting
- Table Tennis
- Film Society
  - Tea Ceremony Society
  - Brass Band
  - Soft Tennis Basketball
  - Volleyball
  - Shorinjikenpo Digital Game
  - Game Development Circle



## **Dormitory**

UAS provides several dormitories that are located on or near campus and each room is fully furnished, making it easy for international students to begin their lives in Kyoto. Residents of the dormitory hail from many different countries, allowing students to deepen their understanding of diverse cultures and values.

## Dorm A

Dorm B

Dorm B is an apartment-type dormitory located 15

Each room is air-conditioned and equipped with a bed,

bookshelf, desk, refrigerator, kitchen, unit bath, toilet and

minutes away from Uzumasa Campus on foot.

Dorm A is attached to the South Engineering Building on Uzumasa Campus, making it a very convenient place to live. Each dormitory room is equipped with a bed, bookshelf, desk, closet and air conditioning. Toilets, shower rooms and refrigerators and laundry rooms are shared, and each resident is provided a meal plan.















## Dorm C

Dorm C is an apartment-type dormitory and is a 3-minute walk from Uzumasa Campus. There is no communal space in this dormitory, ensuring privacy for the residents. Each room is airconditioned and equipped with a bed, desk, kitchen, microwave, refrigerator, washing machine, bathroom and shower. The bed has overhead space for storing luggage and bulkier items.







## Dorm D & E

Dorm D (men's) and E (women's) are located just a few minutes' walk from Uzumasa Campus, making it very convenient for commuting. Communal spaces include the kitchen, shower rooms and laundry machines. There are two options for room sizes, both of which are equipped with a desk, bed closet and air conditioning.









	Dorm A	Dorm B	Dorm C	Dorm D & E		
Monthly Room Rent	63,000 JPY (485 USD)	53,000 JPY - 57,000 JPY (408 USD - 438 USD)	51,000 JPY - 55,000 JPY (392 USD - 423 USD)	29,000 JPY - 53,000 JPY (223 USD - 408 USD)		
Monthly Bedding Fee	1,650 JPY (13 USD)					
Move-in Fee (one-time payment)	20,000 JPY (154 USD)					

- The above fees are subject to change. US dollar equivalents are for reference only. Room rent includes utilities
- . The room rent for Dorms B, C, D, and E will vary depending on the dimensions of the room and the floor on which it is located.
- Dorm A includes a meal plan that offers two cafeteria meals per day on weekdays. Students staying in Dorms B, C, D, and E can sign up for the same meal plan for an additional 20,000 yen per month.
- Meals are not provided on Saturdays, Sundays, national holidays, New Year holidays, nor during restaurant closures.
- Monthly Bedding Fee is optional and only charged to those who request bedding.

(1 USD = 130 JPY)

## Student's Voice



### Sofia Santiago Bentzen



From Norway Enrolled in September 2022 Bachelor's Program

## **Class Schedule**

	MON	TUE	WED
1		Mechanics	Sports Life Skill
2	Programming	Mathematics	
		Lunch	
3	Programming	Physics	
4	Physics	Physics	
5	Mathematics	Japanese Lang.	Japanese Lang.

	THU	FRI	SAT - SUN
1		Design	
2	Mechanics	Mechanics Design	
	Lui	nch	Leisure Time
3	Physics	Mathematics	Leisure IIIIle
4	Mathematics	Physics	
5	Startup Seminar	Japanese Lang.	

My name is Sofia, and I am from Norway. I'm a first year, and I am currently on my second semester.

## Why did you decide to come to Japan?

I chose Japan because I've always wanted to visit and stay for a longer period than just a vacation. Since I knew I wanted to study electrical engineering, Japan was a great option for me, considering that it is ahead in technological development compared to many other countries.

## Why did you choose KUAS?

I chose KUAS because of its inclusivity when it comes to international students. When I researched the different universities in Japan, that is what stood out to me the most. Their curriculum also seemed clear and was very future-headed, which I wanted in my education.

## How is your life at KUAS / in Japan?

Well, I am in my second semester and so far, everything has gone well. I have made a lot of new friends and have been well acquainted with my professors, who I thought would be a lot stricter at first. I participated in and saw a lot of Japanese culture, which has always been a big interest of mine. I think the Japanese culture can be a very big shock to some, but I definitely recommend people to experience life in Japan. I am still discovering new things and places I want to explore.

## What are your future plans?

I am hoping that I will be able to go straight into work in a field I am passionate about after graduating. I plan to work for a period in Japan and spend some years in Norway as well before I eventually go to graduate school. I also plan to do graduate school abroad because I think that it's such a good way to get different experiences, and it may help a lot for future work, plus it will make for a good story.

## Any comments or advice for students that are thinking about studying abroad?

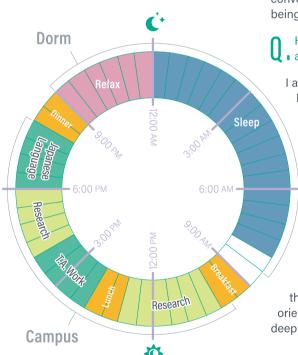
If you are considering joining KUAS, I would definitely say go for it. There are so many opportunities here, especially for international students. It truly is an international school, and you also get to meet the Japanese students that attend here. We have an International Office that will help you with any questions you may have, and they also host some really fun activities.



### Rene Suarez



From Bolivia Enrolled in September 2022 Master's Program



studies here at KUAS.

Hello! My name is Rene Suarez, and I am from Bolivia. I obtained a bachelor's degree in Mechatronics Engineering from the Military School of Engineering in

my home country. Right after graduation, I traveled to Japan to start my master's

## Why did you choose KUAS?

Many factors went into my choosing KUAS. First, the university facilities and equipment amazed me and made me think about all the things that I could create in them. In addition, many high-tier professors are working on very interesting research topics. Those research topics caught my attention and made me want to know more about them. Finally, I chose KUAS for all the support provided to the international students from the first day of the application process, as well as the convenience of the graduate program being completely in English.

## How do you like your life, activity and classes at KUAS?

I am truly enjoying my life at KUAS. Every day I learn something new, not only from the professors but also from the other members of my lab and other labs. In addition, there is always support and guidance in the projects I want to develop. There are also activities organized by the university for the students to learn more, enjoy the Japanese culture and meet local people. I enjoy participating in them when I have the opportunity. Classes are welloriented and make me want to study deeply about the discussed topics.

## What are you studying/ researching?

My research is mainly about the design of new and useful soft robots. Soft robots are robots that are primarily composed of soft materials such as silicone, fabric, and so forth. Right now, I am working on a soft gripper that can grasp a variety of objects of different sizes and only need compressed air as an actuation method. Similarly, I am making a foldable fabric arm that can be used for assistance in wheelchairs or similar devices.

## Any comments or advice for students that are thinking about studying abroad?

My advice for the students that are thinking about studying abroad is that they should take the step and apply for a university abroad if they have the opportunity. Studying in a different country is a completely new experience in which they will not only learn a lot about their interest topics but also about the culture of the country they are visiting. In addition, they will share experiences with people from all around the world, which will help them broaden their perspectives and see things in different ways. It is definitely an experience worth trying.



## **Student Support**

The International Office provides all kinds of support to international students to help them start their life at KUAS with ease. The International Office can assist with visa procedures and applying to scholarships, introduce real estate agents, and provide advice on living in Japan. The International Office also plans exchange events between students and exchange programs between KUAS and other universities. The staff are very friendly and always welcome international students with open arms.



## **Buddy Program**

As an initiative to promote multicultural exchange among students, the International Office provides the "Buddy Program". The purpose of the Buddy Program is to help international students from around the world to get used to student life at KUAS as soon as possible by providing them with support in their daily lives, as well as to offer current students with opportunities to learn through multicultural exchange. Buddies will be international students' first friends at KUAS, who can provide good advice on how to start their life in Japan.

### **Admission**

### Q. Do I need Japanese language skills at the time of my application?

A. No. All engineering courses at KUAS are taught in English, so you do not need to know Japanese before you enroll. After admission, international students take Japanese language classes to improve their Japanese fluency.

### Q. Do I need to provide proof of my English language ability when I apply?

A. Yes, if English is not your native language, you will need to demonstrate your English abilities. Please refer to the chart below for accepted English tests and minimum scores.

Minimum scores		UNDERGRADUATE					
TOEFL	IELTS	PTE	Duolingo English Test				
Internet-based (iBT): 75	Academic overall band score: 5.5	Academic: 50	105				
Minimum scores GRADI							
Minimum scores			GRADUATE				
Minimum scores	IELTS	PTE	GRADUATE Duolingo English Test				

\* For details on English requirement waiver eligibility, please refer to our Admission



### **Visa Support**

### Q. Do you offer visa support?

A. Yes. The KUAS International Admissions Office will help you to acquire a COE (Certificate of Eligibility), which you can then take to the nearest Japanese embassy to apply for a visa.

### **Scholarship**

### Q. What other scholarships are available to me besides KUAS-E scholarships?

A. In addition to the scholarships offered by KUAS, there are numerous other scholarships geared specifically to international students in Japan. These are offered both by various associations as well as the Japanese government. The KUAS International Office will provide students with information about these scholarships after they enrolled.

## Housing

### Q. Are there any housing options other than the on-campus dormitory?

A. Yes. Kyoto is famous for being a college town, and there are many apartments, shared houses and boarding houses to choose from outside of campus. If you do not wish to live on campus, you will need to find a place to live through a real estate agency, etc. KUAS will help you connect with these agencies.

## Part-time Jobs

### Q. Can I have a part-time job in Japan?

A. Yes. If you apply for and receive "permission to engage in activity other than that permitted under the status of residence previously granted" from the Immigration Bureau, you can work part-time at convenience stores, restaurants, etc. According to Japanese law, students can work up to 28 hours per week.

### **Climate**

### Q. What are some examples of living costs in Kyoto, such as food and other goods?

**Living Cost** 

A. The cost of living in Kyoto is actually cheaper than in many North American, European, and some Asian cities. Even in Japan, Kyoto's prices are lower than Tokyo's. Please refer to the sample below.

Monthly living expenses sample						
Accommodation (off-campus)	60,000 JPY (460 USD)					
Food	35,000 JPY (270 USD)					
Personal expenses*	15,000 JPY (116 USD)					
Total	110,000 JPY (846 USD)					

\* Excluding book expenses for classes

(1 USD = 130 JPY)

## Price of major staple foods in Japan Rice (5kg): about 2,000 JPY (15.30 USD) Bread (1kg): about 400 JPY (3.07 USD)

Milk (1L): 250 JPY (1.92 USD) Eggs (dozen): 220 JPY (1.69 USD)

## Typical restaurant prices

Hamburger: 240-700 JPY (1.84-5.38 USD) Beef bowl: 390 JPY (3.46 USD) Ramen noodles: 700 JPY (5.38 USD)

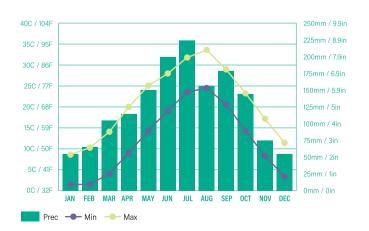
## ¥ Prices for staples and consumer goods

Toilet paper: 12 rolls: 300 JPY (2.30 USD) Movie ticket: 1,900 JPY (14.61 USD) Subway fare: 220-290 JPY (1.69-2.23 USD) Bicycle: 15,000 JPY~ (starting from 115 USD)

(1 USD = 130 JPY)
\* US dollar equivalents are for reference only.

## Q. What is the climate like in Kyoto?

A. Kyoto has four distinct seasons. Summers are hot and humid, averaging about 30 degrees Celsius, and winters are cold but the temperature rarely goes below freezing. There is a month-long rainy season between spring and summer. Typhoons sometimes come during the summer and early fall, but they have less impact on Kyoto than other regions of Japan. Spring and fall are especially pleasant. One of the charms of Kyoto is the variety of natural scenery that can be enjoyed in each season.



## **Course Fees**

	1st year				2nd year	3rd year	4th year
	Admission fee	Tuition	Association fees	Total			
Bachelor's Program	260,000 JPY	1,340,000 JPY	49,500 JPY	1,649,500 JPY	1,476,500 JPY	1,476,500 JPY	1,501,500 JPY
	(2,000 USD)	(10,308 USD)	(380 USD)	(12,688 USD)	(11,358 USD)	(11,358 USD)	(11,550 USD)
Master's Program	200,000 JPY	1,000,000 JPY		1,200,000 JPY	1,000,000 JPY		
Master's Program	(1,538 USD)	(7,692 USD)	-	(9,230 USD)	(7,692 USD)	_	_
De storel Dreamon	200,000 JPY	1,000,000 JPY		1,200,000 JPY	1,000,000 JPY	1,000,000 JPY	
Doctoral Program	(1,538 USD)	(7,692 USD)	_	(9,230 USD)	(7,692 USD)	(7,692 USD)	_
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Super KUAS-E Scholarship

(1 USD = 130 JPY)

KUAS-E Scholarship

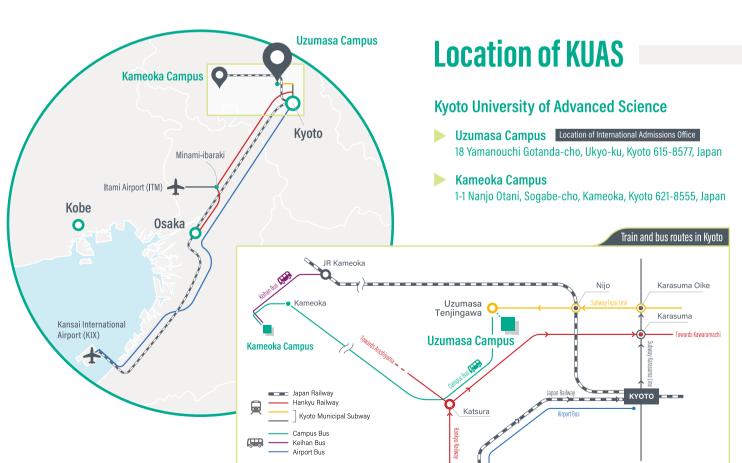
## **Scholarships**

Applicants who wish to request a scholarship are required to indicate such on their application form when applying to KUAS. Scholarships are provided to a limited number of outstanding students based on a comprehensive evaluation. Qualified students will undergo a performance review each semester. Scholarship recipients must maintain academic excellence to retain their scholarship.

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larship are cation form are provided dents based ed students ch semester.	Stipend (for personal expenses)  1,200,000 JPY/year  (9,230 USD/year)  + Tuition exemption  100%  + Admission fee exemption  100%	Tuition exemption 100% + Admission fee exemption 100%	Tuition reduction 50% + Admission fee reduction 50%	Tuition reduction 30% + Admission fee reduction 30%
Bachelor's Program	0	0	0	
Master's Program	0	0	0	0
Doctoral Program	0	0		

<sup>\*</sup> US dollar equivalents are for reference only.

(1 USD = 130 JPY)



KUAS does not provide transportation services from the airport to the campus.

<sup>\*</sup> All prices are subject to change without prior notice due to currency fluctuation, etc. \* Tuition includes facility and laboratory fees.

\* For undergraduate students, the laboratory fee increases from the second year. An alumni association fee is required in the fourth year.