Roberts, Leslie A.

From: Simmons, Jeannie
Sent: Wednesday, March 1, 2023 11:39 AM
To: Pelan, Renee
Cc: Sturges, Kyle B.; Kyff, Alyssa; OIA Education Abroad Program Manager; Roberts, Leslie A.; Ogburn, Laurie; Pierskalla, Tiffany R.
Subject: Approval of Engineering Experience in Japan

Dear Dr. Pelan,

Greetings from the Office of International Affairs (OIA) Global Education unit!

Thank you for submitting a new program proposal for the upcoming academic year. A summary based on your responses follows and a copy of the form is also attached to this message for quick reference. If any of this information is incorrect or needs to be updated, please let me know.

College:	COE
Program Title:	Engineering Experience in Japan
Location(s):	Japan
Term:	SU 24
Academic Year	2023-2024
Course number(s):	ENGR 5797.XX
Credit hour(s):	3
OIA Contact:	Alyssa Kyff

After internal review by OIA Global Education and the Office of Risk Management (ORM), your Reauthorization has been approved and you may proceed with standard program planning activities. Approval is contingent upon ongoing review of your proposed itinerary of activities and locations by ORM.

Status of International Travel

International travel continues to improve, and we hope this trend continues, but guidelines from both host countries and the U.S. Department of State and Centers for Disease Control and Prevention remain fluid and have often changed at a moment's notice. As best practice in the field of international education, we rely solely on official, government communications regarding these updates to entry/exit requirements and other policies and practices that would impact travel. Ohio State, the OIA, nor ORM have any control over these requirements.

OIA Collaboration

Please keep in mind that traveling with students comes with many additional considerations and responsibilities than traveling individually. As professionals in the field of international education, the Global Education team brings ample experience and expertise in program management and best practices. We regularly review and refer to professional resources including NAFSA: Association of International Educators and The Forum on Education Abroad, amongst other sources, including our network of peers, for benchmarking and guidance affecting trends in the field of international education. We are excited to share this expertise with you as it relates to many aspects of developing your program including, but not limited to recruitment, program budget creation, and contingency planning.

Course reminders

- Any questions regarding the impact of leading a Global Education program on your faculty's course load should be directed to the head of their academic unit.
- The course must be set up with special course attributes for study abroad once it is confirmed that the program has filled. Your departmental scheduler will be required to set up the course according to instructions provided by the Office of the Registrar.
- For programs that require a pre-departure course component (e.g., an autumn term course enrollment for winter break travel), please share the day and time the course will meet so that it can be made available to prospective students to hold this time in their schedules.

Recruitment, program dates, flights, and program fee setting

- Responsibility for program recruitment will be shared by International Affairs and the college.
    - To maximize university resources and provide affordable programs for Ohio State students, should a program not meet minimum enrollment, it may be cancelled.
- Program dates are established to best advise students on when to arrive and when they will depart the program. If you are planning on arriving early for program-related activities (e.g., meeting with the onsite provider to finalize certain aspects of the itinerary), please let your OIA contact know as soon as possible so that these additional days may be budgeted.
- While group flights are not required, they offer a number of administrative, financial, logistical and risk management support and benefits that are otherwise lacking when booking individual airfare.
    - We recommend considering group flights for programs traveling over winter or spring break (given the brief time frame and tight schedules) or for programs with potentially challenge flight itineraries.
    - For programs with group flights, one resident director must be on each leg of the group flight. If you do not plan on flying on one of the legs with the students, please discuss this request with your OIA contact while creating the program specifications.
        - *Please note: not all requests will be possible.*
- Program fees will be set in a collaborative process between OIA and the college. Changes to the itinerary that necessitate cost increases are not possible after the program fee has been set.
- For additional information, please refer to our website for Current Resident Directors.

Working with providers/vendors for in-country arrangements

Following best practices in the field of international education, ORM, the Office of Academic Affairs (OAA) Business Services & Finance, and OIA strongly recommend faculty-led global education programs use Scholartrip, Ohio State's contracted group travel agency, to secure in-country services. If resident directors have compelling reasons for securing in-country arrangements directly on their own (decentralized arrangements), ORM, OAA Business Services and Finance, and OIA will review the request. ORM, OAA, and OIA reserve the right to deny decentralized in-country arrangements and use of providers or in-country arrangements that do not meet university safety, risk, and fiscal expectations.

Next steps

You will soon be contacted by your OIA contact to begin working on specifications for your program.

Please know that you are welcome to contact me with any questions or concerns as we move through the program development process.

We look forward to working with you on this global education opportunity.

Best,
Jeannie

Jeannie B. Simmons
Director, Global Education

The Ohio State University
Office of International Affairs
Global Education
140 Enarson Classroom Building
2009 Millikin Road, Columbus, OH 43210
614-292-6101 Office
simmons.272@osu.edu / oia.osu.edu.osu.edu

Pronouns: she/her/hers

Course Proposal

JAPANESE AMERICAN DESIGN EXPERIENCE (JADE)
ENGR 5797.XX

INITIAL OFFERING: MAY 2024

Contents

DRAFT

Course Narrative

Overview

In fields like automobiles, high-speed rail, semiconductors, gaming consoles, and optical/precision equipment, Japan is famous for its technological advancements and engineering marvels. This new course will focus on exploring design, engineering and sustainability in a Japanese cultural context. The class will focus on how education and culture influences design choices and technology in Science, Technology, Engineering, and Math (STEM) fields.

This course will include 20 days in Japan and partner with Kyoto University of Advanced Science and University of Tsukuba. While in the country, students will participate in a rigorous schedule of industry and cultural site visits, attend lectures from professors, and have multiple networking opportunities with Japanese students, professors, and professionals. We will also use our time abroad to develop students' cultural awareness through intercultural interactions, collaboration, and appreciation. This will allow student to reflect on their own culture as well as others in their day-to-day life.

Travel Logistics

The travel component of this course will take the group between Kyoto and Tsukuba in Japan as well as day excursions to nearby Japanese cities over the course of 2.5 weeks. We plan arrive in Osaka and will utilize high-speed rail to travel between cities, in addition to private buses and public transportation when needed to visit external sites. Our travel will end with a departure from Tokyo to return to Columbus. All travel, including flights to/from Japan will be completed as a group. Additionally, all transportation and lodging arrangements will be made through a provider selected in partnership with OIA/CoE.

Student Group Makeup

The main student audience for this program would be undergraduate or graduate students with an interest in design, sustainability, technology and engineering in international cultural settings. To reflect this, we plan to recruit a diverse class of students from a range of STEM majors and backgrounds.

Course Syllabus

ENGR 5797. XX Japanese American Design Experience (JADE)
May 2024

Course Time and Location

TBD Day TBD time TBD Location

Resident Directors

Renee Pelan
Pelan.5@osu.edu
Japan Phone # while travelling
LINE
Hitchcock Hall 122

Daniel Pradel
Pradel.1@osu.edu
Japan Phone # while travelling
LINE
Hitchcock Hall 403

Class Materials

Passport;
Access to Laptop or iPad;
E-Books will be available for your research at the OSU Libraries for purposes of this course

Objectives

ENGR 5797.XX students will:

1. Gain a strong appreciation for the historical, cultural, political and socio-economic conditions in the context of a nonwestern culture by researching Japanese design and engineering projects.
2. Develop Global sensitivity about design practices and problem solving techniques.
3. Develop skills and values that support intercultural teamwork.
4. Develop good written and oral communication skills.

Expected Learning Outcomes

Successful ENGR 5797.XX students are able to:

1. Engage in critical and logical thinking about design and engineering projects.
2. Engage in an advanced, in-depth, scholarly exploration of a course topic.
3. Identify, describe, synthesize and discuss approaches or experiences as they apply to a design or engineering projects in Japan.
4. Building on their intercultural experience, demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, to respond to new contexts.
5. Describe, analyze, and critique the roles and impacts of human activity and technology on a different human society or natural environment, in the past, present, and future.

Course Summary

The Japanese American Design Experience (JADE) program is an exciting opportunity for STEM majors to be exposed to a nonwestern problem solving approach by studying specific engineering and design applications in Japan. This program will enable students to collaborate with professors and students at University of Tsukuba and Kyoto University of Advanced

DRAFT

Science, along with engineering site visits in the region (see Appendix 1). Students will attend workshops focused on engineering design and technological applications in the fields of engineering, extreme events, sustainability and design. In addition to their academic studies, students will participate in cultural activities, such as visits to historic sites, traditional ceremonies, and social events with local students.

Throughout the program, students will be immersed in the Japanese culture and will have the chance to learn basic Japanese and practice their skills with native speakers. They will stay in on-campus residences mostly and will be paired with local students at the universities providing a unique opportunity to experience Japanese daily life and culture. This program aims to provide students with an introductory understanding of engineering and design in the Japanese and global context, while also expanding their global perspectives and enhancing their intercultural competence.

During class sessions, general announcements and discussions will be led by instructors and students will work on assignments and preparations for the engineering and design component while in country. The study abroad portion of the class will focus on interactions with professors and students from Kyoto University of Advanced Science and Tsukuba University.

Grading (class taken at OSU)

Attendance & Participation	15%

Grading (class taken in Japan)

Participation & Conduct	15%
Assignments	
Reflection Journal	10%
Engineering On-Site Presentation	10%
Engineering Technical Summary	25%
Engineering Presentation	25%

Participation and Conduct (15%)

Students are expected to be active participants in class presentation and tours, to include asking appropriate questions and sharing information, opinions and/or experiences. In addition, each student is expected to conduct themselves appropriately and respectfully.

Reflection Journal (10%)

Student will keep a physical or digital reflection journal to answer a series of prompt about Japanese culture, technology, and engineering during their time abroad. Student will share experiences and reflect on what they learned throughout the week. Student will submit their reflection journal at the end of the class.

Example prompt may include: What do you hope to takeaway from the JADE program (professionally and personal development)? How prepared is Japan for a major earthquake?

DRAFT

Engineering On-Site Presentation (10%)
Each student(s) will be expected to be the subject area expert and/or "tour guide" at a specific historical or technical site.

For each historical and cultural site, a 10-15 minute presentation should include, as a minimum, the following information:

- Who ordered the construction?
- Why was this location selected?
- Dates of construction.
- Construction techniques, including choice of materials and special design features.
- History of the site, and if relevant: research performed by scholars.
- Environmental impacts and/or changes since the time of construction.
- For Historical Sites: Preservation/Restoration efforts and the engineering/science behind efforts
- For Technical sites: Current research and/or future initiatives.

At the end of the presentation, students will submit an annotated bibliography about the site. Sources may include scholarly publications, websites, articles, books, and primary sources.

Example sites could include but are not limited to: Hyogo Earthquake Engineering Research Center, Himeji Castle, Todaiji Temple, Horyuji Temple, Yasaka Jinja, Kiyomizu Dera, National Research Institute for Earth Science and Disaster Prevention, Mt. Tsukuba, Ushiku Daibutsu, Tokyo Skytree, Tsukuba Space Center/JAXA, Toyota/Honda, Senso-ji, teamLabs

Engineering Technical Summary and Presentation (25% and 25%)
Student will be divided into groups of 2-3 students and write a technical summary about a specific topic related in STEM in Japan. A list of topics will be given to students while at OSU, however students can propose a topic which will require instructor approval. Students will present in-person on their topic on the 2nd to last day of the program. Following the presentation, there will be a Q&A and group discussion moderated by the instructors. Presentation will be about 20 – 30 minutes followed by about 15 minutes of questions and discussions.

The Technical Summary and Presentations will include the following:

- History and Description of Topic.
- Impact of Cultural or Geographical Influences.
- Comparisons/Interactions with United States or other countries.
- Preconceived ideas and/or perceptions from other cultures.
- Government Agencies, Research Institutions, and Companies involved.
- Future of technology/research and goals.
- Future impacts (technological, economic, political, social, cultural, etc.).
- Discussion/conclusions.
- List of references.

Examples of topics include but are not limited to: Train Transportation, Disaster Preparedness (e.g., typhoons, tsunamis, earthquakes), Food Packaging Industry, Semiconductors/Microelectronics Industry, Robotics and AI, Nuclear Energy, JAXA Research, Biomedical Technology/Research to Support Ageing Populations.

DRAFT

Submitting Assignments:
Unless otherwise noted, assignments are due at the beginning of class. No late homework will be accepted without prior instructor consent or in the event of unforeseen emergency arises.

Academic Misconduct
It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 33356-5-487). For additional information, see the Code of Student

Professional Conduct
Students are expected to conduct themselves in a professional manner and to abide by the provisions in the Code of Student Conduct. Students should appreciate diversity, and they should conduct themselves professionally with members of the opposite gender and/or from different cultures. Any forms of sexual harassment or intimidation will not be tolerated. The University's Code of Student Conduct and Sexual Harassment Policy are available on the OSU web page. Harassment can occur between two or more students and between students and faculty, and the actions can take place in physical, verbal, or written forms. When a complaint is received, the situation will be investigated by the department and possibly by the police even if the harassment was done anonymously or possibly as a jest. Being found guilty of harassment, even if it was nominally done in jest, can be professionally damaging.

Students are also reminded to represent themselves in a professional manner in any information that they wish to share with the public. This includes information on personal forums available inexpensively on the web. Examples are TikTok and Facebook. Information on these pages is often screened by potential employers, and unprofessional material can have a negative impact on job prospects.

Accommodations & Services
Our inclusive environment allows for religious expression. Students requesting accommodations based on faith, religious or a spiritual belief system in regard to examinations, other academic requirements or absences, are required to provide the instructor with written notice of specific dates for which the student requests alternative accommodations at the earliest possible date. For more information about religious accommodations at Ohio State, visit http://odi.osu.edu/religious-accommodations.

Students with disabilities that have been certified by the Office of Disability Services will be appropriately accommodated, and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 098 Baker Hall, 113 W. 12th Ave; telephone 292-3307; http://www.ods.ohio-state.edu/ General Questions: slds@osu.edu | Exam/Quiz Accommodations: slds-exam@osu.edu.

DRAFT

Course Schedule

Week	Date	Materials/Events	
Week 1	5/6/24	• Ice Breakers • Trip Overview • History of Technology in Japan • Library Resources with Engineering Librarian • Start research on engineering/design topics ○ Concept Map and Plan • Set Up Reflection Journal • Submit Topic Preferences	Columbus
	5/7/24	• Ice Breakers • Etiquette and Professional Conduct in Japan • Site Presentation and Technical Summaries Assigned • Continue research engineering/design topics, and setting up blog	
	5/8/24	• Travel Day to Japan from CMH	Travel component
	5/9/24	• Arrive in Japan • Travel to KUAS • Dinner and Settle in (Recover from Jetlag)	
	5/10/24	• Welcome to Kyoto University of Advanced Sciences • Campus Tour/Lab Facilities Tour • Cultural exchange • Engineering Lecture • Meet KUAS Student Pairs	
	5/11/24	• Engineering Lecture • Japanese Basic Lecture • Work with student group	
	5/12/24	• Engineering Lecture • Japanese Basic Lecture • Work with Student group	
Week 2	5/13/24	• Hyogo Earthquake Engineering Research Center (or other site from Appendix 1) • Himeji Castle • Work with Student group	
	5/14/24	• Engineering Lecture • Japanese Culture Lecture • Work with Student group	
	5/15/24	• Nara/Horyuji Day Trip • Todaiji Temple • Higashimuki Shopping Street and Mochiidone Shopping Arcade • Horyuji Temple	

	5/16/24	• Heritage sites Kyoto, e.g.:
		  ○ Yasaka Jinja
		  ○ Kiyomizu Dera
		  ○ Higashiyama	

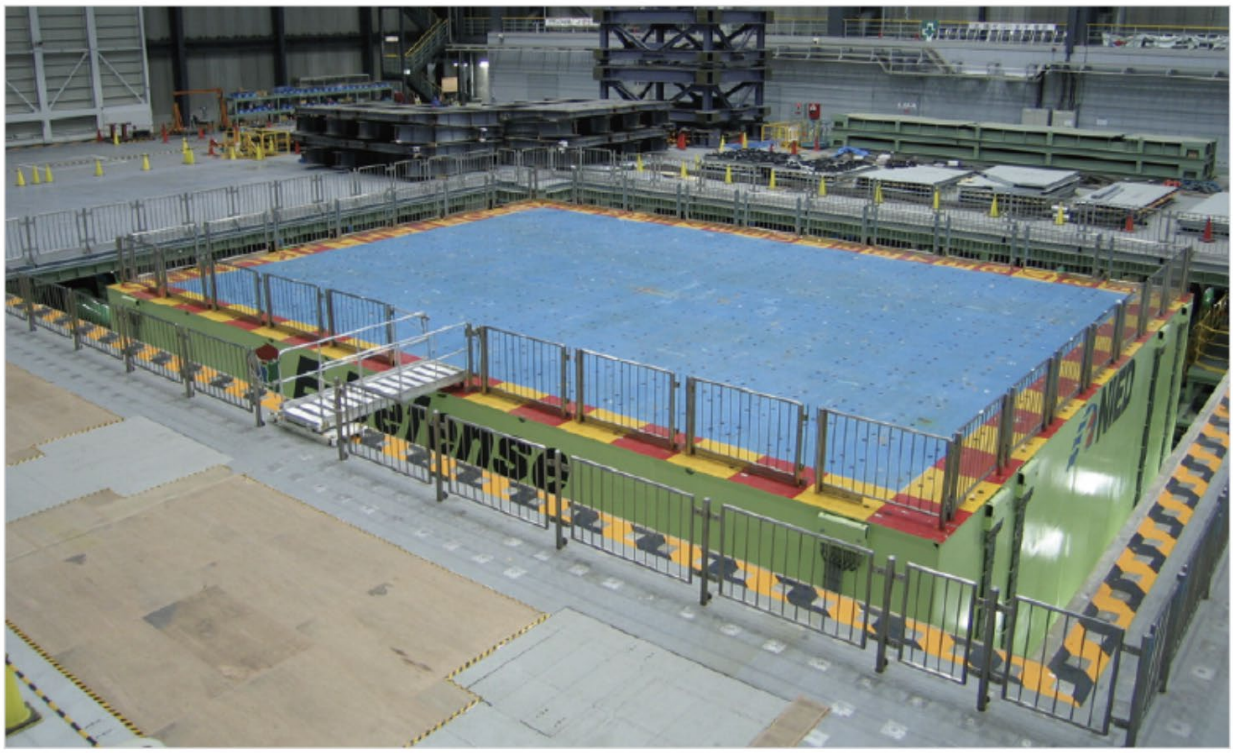
		○ Gion district	
	5/17/24	• Heritage sites Kyoto, e.g.: ○ Kinkakuji ○ Nijo Castle ○ Ryoan-ji Rock Garden	
	5/18/24	• Free Day with KUAS Student pairs • Farewell Dinner with KUAS	
	5/19/24	• Industrial Excursion (see Appendix 1).	
Week 3	5/20/24	• Shinkansen to Tokyo • Tsukuba Express • Evening dinner/Welcome with Professors, Staff and Students	
	5/21/24	• Introductions to program at Tsukuba • Cultural Exchange with Faculty and Students • Engineering Lecture on Disaster Preparedness • Smart City Initiatives	
	5/22/24	• Earthquake Disaster Preparedness Site Visit • Work with Student group	
	5/23/24	• Site Tour (see Appendix 1). • Work with Student group	
	5/24/24	• Tour of Tsukuba Space Center (see Appendix 1) • Work with student group	
	5/25/24	• Mount Tsukuba (shrine and cable cars) • Ushiku Daibutsu Buddha Statue • Evening Sports event with Tsukuba students	
	5/26/24	• Site Tour (see Appendix 1). • Student group collaboration	
Week 4	5/27/24	• Student Presentations on Engineering and Design in Japan. • Tsukuba Farewell Dinner	
	5/28/24	• Tokyo Day Trip	
	5/29/24	Travel Day to Home, Arrive Home	
	5/30/24	Work on reflection journals	Columbus
	5/31/24	Submit reflection journals	

Appendix 1

Site visits will depend on group size, background and hosts availability. This appendix describes site visits currently available and being considered by instructors. Final selection is expected during SP24 semester.

1. Hyogo Earthquake Engineering Research Center

Near Kyoto is the largest Earthquake Engineering experimental facility of its kind in the world, E-Defense can re-create seismic shaking in the three dimensions of back/forth, left/right and up/down, reproducing the process by which life-sized buildings and structures are destroyed.



2. Tsukuba Large-Scale Rainfall Simulator

Tsukuba's Large-Scale Rainfall Simulator is the largest experimental facility of its kind in the world, with peerless ability to reproduce hourly rainfall of 15-300mm. It can be used for the engineering of transportation and urban infrastructure projects.

3. Tsukuba Large-scale Earthquake Simulator

Tsukuba's large-scale seismic resistance experimental facility can re-create the shaking from large earthquakes to verify the design of tanks, residences and infrastructure projects to prevent disasters.

4. Horyuji Temples and Pagoda in Nara

From a historical perspective Japan has the oldest wooden buildings in the world, with Horyuji (near Kyoto) being the home of more than twenty buildings built before the IXth century. Importantly, these buildings have resisted numerous high magnitude earthquakes, which is remarkable from a Structural Engineering perspective At Horyuji, the five-story pagoda and the main hall were both originally built around the year 600 but after a fire were rebuilt around the year 700.

5. Kawasaki Heavy Industries (Kobe City, near Kyoto)

Showcase of technology made by the Kawasaki Heavy Industries Group including ships, rolling stock, aircraft, and motorcycles.

6. Toyota Technology Museum (Nagoya, between Kyoto and Tokyo)

Showcase of technology made by Toyota through the years. The Toyota Technology Museum boasts over 4,000 exhibition pieces in their Nagoya-based building.

DRAFT