

IAC News No.134

The IAC News introduces significant and unique international projects, technologies, symposium, communication undertaken by JSCE IAC, International Section, ACECC, and Research & Development Section with over 30 committees, state-of-art- civil engineering technologies and projects, great and interesting achievements of civil engineer and researcher once a month.

This month's issue features 2 unique human development programs: Hokkaido University' Nitobe College and annual JSCE Open Campus, and JSCE Earthquake Engineering Committee's report about the field survey of 2023 Trukey-Syria Earthquake. More details are read on that committee's HP (<https://committees.jsce.or.jp/eec2/node/215>).

We are happy to receive your interests, requests and feedbacks anytime. Thank you

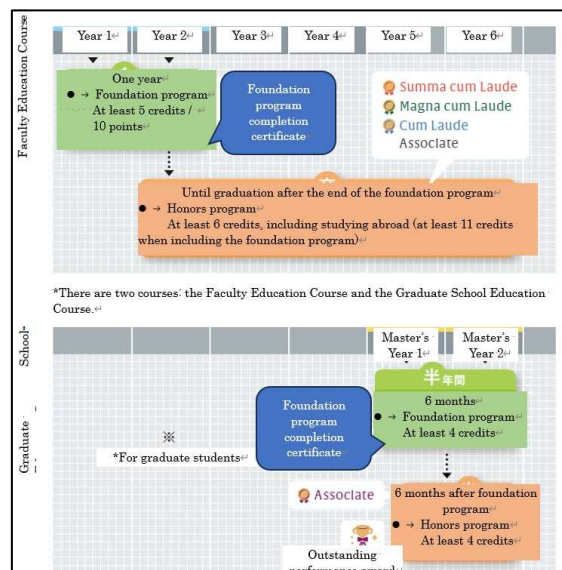
~ Universities International Courses ~ Nitobe College, Hokkaido University

This article looks at Nitobe College, a global education program at Hokkaido University that has been set up to develop human resources that are internationally minded and can apply themselves across different fields. Based on the philosophy of Hokkaido University and Nitobe Inazo's spirit of learning, Nitobe College focuses on academic expertise and aims for students to acquire English proficiency, leadership and teamwork skills, and the ability to solve problems within a multi-cultural environment. The Graduate School Education Course, which is for all graduate students, including those in master's or professional degree programs, as well as international students, aims to provide an opportunity for students with diverse cultural backgrounds and specialties to deepen their knowledge collectively and to foster their ability to think beyond the confines of their specific fields of expertise.



Assoc. Prof. Katsufumi Hashimoto
(Hokkaido University)

Nitobe College offers a foundation program for both the Faculty Education Course and the Graduate School Education Course (graduate school admissions in the 2022 academic year: 77 (33 of which were international students)) and an honors program (graduate school admissions in the 2022 academic year: 32 (12 of which were international students)). The screening of admitted students is done according to their language capabilities and an issue report assessment. The honors program can be taken by



From admission to Nitobe College to completion of course (sourced from a Nitobe College pamphlet)

individuals who complete the foundation program and demonstrate outstanding performance (a scholarship system is available, including for studying overseas). In the 2019 academic year, the faculty and graduate school were integrated into the six-year program that exists today. In the academic years 2020 and 2021, the number of international students enrolled in the Graduate School Education Course fell due to the COVID-19 pandemic, but this number bounced back in the 2022 academic year.

I am in charge of a subject in the graduate school foundation program (Practice of Team-Based Learning). Based on the basic skills and knowledge of project management indicated in the Project Management Body of Knowledge (PMBOK), teams are formed of about five members to utilize their fortes, and they manage and facilitate tasks from the conception of a project to proposing concrete outcomes with regards to the set topics of either measures against bears within Sapporo or the acceptance of refugees within the university campus. Examples of projects that are proposed are a project that brings together engineering to develop a sensor for monitoring the habitats of bears and agriculture to revitalize undeveloped woodland serving as a buffer zone with urban areas, and a project that links information technologies related to building a logistics network to achieve food donations to refugees and reducing food loss and construction technologies to build a simple camp facility that can be used in cold climates.

Nitobe College has established initiatives to support students in forging their careers and has built a system that actively supports networking through attending fellow and mentor lectures led by graduates as well as holding forum events. In pushing forward by linking global human resource development and career education, by fusing technological seeds and ideas across fields in an international and interdisciplinary manner, I believe that the role of Hokkaido University's Nitobe College will be significant as a space and environment to cultivate individuals and capabilities that can shape new needs suitable for society and drive projects forward.



Lecture in Progress

【Reported by Assoc. Prof. Katsufumi Hashimoto, Hokkaido University 】

JSCE Open Campus 2023

■ About JSCE Open Campus

The Civil Engineering PR Group did not hold JSCE Open Campus, an event that started back in 2017, in fiscal 2020 due to the COVID-19 pandemic, and in fiscal years 2021 and 2022, it was held as an online event. With the pandemic showing signs of easing off, in fiscal 2023 on Saturday, July 22, JSCE Open Campus was held in person for the first time in four years at the JSCE Headquarters in Yotsuya, Shinjuku Ward, Tokyo. The event opened up the JSCE Headquarters to members of the general public, with many visitors, including people with ties to the society, their family members, and students, in attendance. The event was an initiative to deepen the visitors' interest and understanding of civil engineering through various workshop programs as well as archives and footage possessed by JSCE. Members of the local community and those working in fields other than civil engineering also attended, and as an organization open to the public, local communities, and society as a whole, the aim was to broadly give back and contribute to society using the knowledge and resources at JSCE's disposal.



Yuma Ohtani
(JSCE
Communications and
Public Relations
Center)

■ Programs at JSCE Open Campus

The programs at JSCE Open Campus are shown in Table 1. Each program was held with the help of each JSCE committee and related organizations, and I would like to take this opportunity to introduce a few of the programs.

Civil Engineering Fureai Festa taught attendees about civil engineering through hands-on demonstrations and workshops that were easy to understand even for people outside of civil engineering, including activities such as scooping up bouncy balls floating in water by using a remote-controlled toy version of a piece of heavy construction machinery (Photo 1), learning about the structures of bridges and tunnels (Photo 2), learning why landslides and liquefaction happen, measuring distances with one's feet, and playing a card game themed around disaster prevention (PokeDobo card game).

Program		Committee in Charge, etc.
Civil Engineering Fureai Festa	Pacing off workshop - 'Let's measure distances'	Citizen Exchange Research Subcommittee, Consultant Committee
	Learning through civil engineering card game	
	Liquefaction demonstration - 'How does liquefaction work?'	
	Learn about the types of bridges and their strengths	
	Take a trip together with water!	
	Civil engineering quiz - 'Aim to get all the questions right!'	Slope Engineering Research Subcommittee, Geotechnical Engineering Committee
	Landslide demonstration with nuts	
	Demonstration to move slope with water	
	Arch bridge model	Next Generation Education Subcommittee, Structural Engineering Committee
	Overlapping beams	
	Tunnel demonstration - 'What shape makes a strong tunnel?'	Engineering Exchange Section, Tunnel Engineering Committee
	Learn about disaster prevention through the PokeDobo card game	Young Civil Engineers Power Up Subcommittee, Planning Committee Meeting
	Scooping up bouncy balls with remote-controlled heavy construction machinery toy	Robotics Committee in Construction
Concrete accessories	Department of Civil and Environmental Engineering, Faculty of Engineering and Design, Hosei University	
Civil Engineering Quiz Rally	JSCE Communication and Public Relation Center	
Civil Engineering Terrace (coloring-in and reading area, area introducing JSCE, etc.)		
Mini Civil Engineering Collection Exhibition (green screen commemorative photo, Daboku Collection train model, Daboku Collection capsule toys, etc.)	Central Japan Railway Company, JSCE Communication and Public Relation Center	

The Mini Civil Engineering Collection Exhibition was also held as a special event project. Under the theme of the “Linear Chuo Shinkansen,” this special event project was put together with the help of the Central Japan Railway Company and excited children and adults alike by communicating the scheme, history, and charm of the Linear Chuo Shinkansen through green-screen photos, a Doboku Collection train model (Photo 3), and Doboku Collection capsule toys (Photo 4).

Also, as the Civil Engineering Quiz Rally, a quiz was held in each program venue, and by making it a rally format, it was an endeavor that encouraged more people to visit each program venue to experience what was on offer.



Photo 1 Scooping up bouncy balls with remote-controlled heavy construction machinery toy



Photo 2 Tunnel test - ‘What shape makes a strong tunnel?’



Photo 3 Doboku Collection train model



Photo 4 Doboku Collection capsule toys

■ Survey Results of JSCE Open Campus and Looking Ahead to Next Year

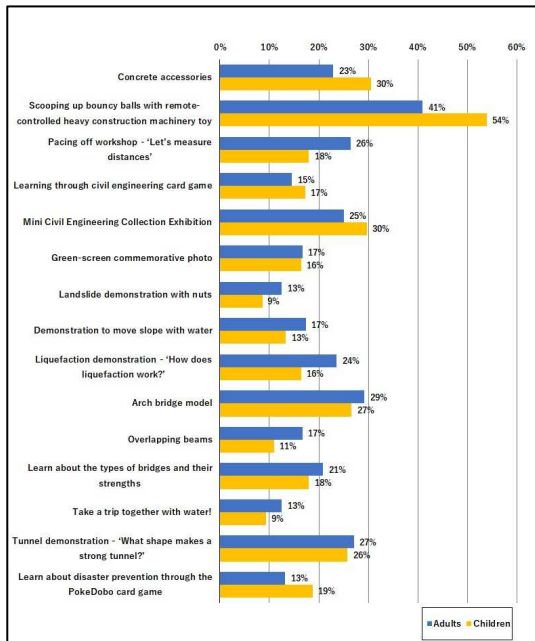
The results of the survey taken by visitors are shown in Figure 1. The survey results were that children and adults both enjoyed the event overall. The event received high praise, with 99% of people answering, “I want to come back next year.” As was the objective of the event, the survey results gave a sense that attendees took an interest in civil engineering.

In the programs, the activity of scooping up bouncy balls floating in the water by using a remote-controlled toy version of a piece of heavy construction machinery was said to be interesting by over 50% of children.

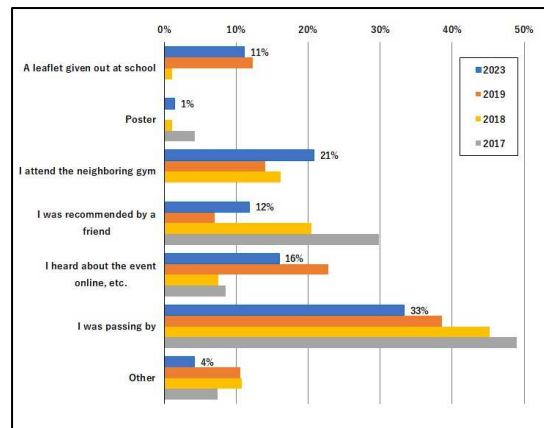
As for how they came to attend the event, the most common answer from visitors was, as in past years, “I was passing by.” This was followed by “I attend the neighboring gym” and “I heard about the event online, etc.,” which were more common answers this year. The percentage of visitors as a result of promotional activities such as handing out flyers at elementary schools nearby and posting information on JSCE’s social media accounts rose to close to 30% overall, showing that the hard work of these promotional activities paid off.

The number of visitors was 357, achieving a 126% increase in visitors compared to last time (fiscal 2019). In fiscal 2024, the aim is to increase the number of visitors again, and by further enhancing promotional activities and putting out information effectively, we wish to make JSCE Open Campus an even more attractive event by considering further enhancing/improving the programs and extending the duration of the event by increasing the number of committees that help to organize it.

Figure 1 Visitor Survey Results



Interesting Programs (Multiple Answers Allowed)



How did you hear about the event

【Reported by Yuma Ohtani, Civil Engineering PR Group, Citizen Exchange Group, JSCE Communications and Public Relations Center】

Field Survey of the 2023 Turkey–Syria Earthquake

On February 6, 2023, two M7-class earthquakes occurred one after the other with their epicenter in southeastern Turkey, causing extensive damage. This article reports on the field survey conducted by the Subcommittee on Earthquake Damage Investigation, the Earthquake Engineering Committee, JSCE. The subcommittee conducted two separate field surveys: the first group from March 29 to April 2, 2023, and the second group from May 2 to May 10, 2023. The first group participated in the field survey conducted mainly by the Architectural Institute of Japan (AIJ), and mainly investigated geotechnical disasters.

The second group was led by the subcommittee, which conducted a joint survey with the Japan Association for Earthquake Engineering and the Japanese Geotechnical Society, mainly to investigate damage to infrastructures. The second survey team was supported by the JSCE International Activities Center, and Associate Professor Beyza Taşkın of Istanbul Technical University from the JSCE Turkey Section also participated in the survey team. The results of the survey were presented at the “Preliminary Report of the Damage Survey on the February 2023 Earthquakes in Southern Turkey (M7.7 and M7.6)” which was co-hosted by the Earthquake Engineering Committee and the Japan Association for Earthquake Engineering (May 29, 2023), and “Learning from the 2023 Turkey-Syria Earthquake” (September 7, 2023). The research and investigation by the members of the survey team is still ongoing, and the subcommittee is now preparing a report.

Finally, we would like to express our deepest condolences to the victims of the earthquake and thank all those who cooperated in conducting the survey.



Prof. Yusuke Ono
(Earthquake
Engineering
Committee, JSCE)



FYI: Preliminary Report of the Damage Survey on the February 2023 Earthquakes in Southern Turkey (M7.7 and M7.6)

<https://committees.jsce.or.jp/eec2/node/215>

**【Reported by Prof. Yusuke Ono, Chair, Subcommittee on Earthquake Damage Investigation,
Earthquake Engineering Committee, JSCE】**

Updates



- ◆ The International Infrastructure Archives
– A Compilation of Japan’s Greatest Projects in Transfer of Civil Engineering Technology in Service –
<http://www.jsce.or.jp/e/archive/>
- ◆ Infrastructure System Resilience: An Engineering Framework for Assessment, Management, and Governance
<http://arxiv.org/doi/10.1061/9780784485088>
- ◆ Joint Company Information Session for Int'l Students, Online (December 9)
<http://www.jsce-int.org/>



- ◆ IAC “News Pick Up!!” on the JSCE Japanese website
https://committees.jsce.or.jp/kokusai/iac_dayori_2023
- ◆ Call for JSCE Award Nominations: “International Lifetime Contribution Award” and “International Outstanding Collaboration Award”
http://committee.jsce.or.jp/kouken_ho/R5_English
- ◆ 【YouTube】 Civil Engineering, in Your own Words (Full ver.)
<http://youtu.be/r1Dc37kABXM?feature=shared>
- ◆ 2023 Civil Engineering Design Prize, JSCE
<http://design-prize.takura.ne.jp/>
- ◆ Summary of featured articles in JSCE Magazine Vol. 108, No.12, December 2023
<http://www.jsce-int.org/pub/magazine>
- ◆ Journal of JSCE
<https://www.jstage.jst.go.jp/browse/journalofjsce>
- ◆ Call for Papers: Advances in AI, Data Science and Digital Twin
<http://committee.jsce.or.jp/struct1002/node/36>
- ◆ Safe and Healthy Work in the Digital Age 2023-2025 Campaign
<http://healthy-workplace.oha.europa.eu/en/media-centre/event/launch-ceremony-healthy-workplace-campaign-safe-and-healthy-work-digital-age-2023-2025>
- ◆ 【YouTube】 Taiwan Public Infrastructure Archive Public Water Supply Series
http://youtu.be/mMMvODEvd_Q?feature=shared
- ◆ 38th Indian Engineering Congress
<http://www.38iec.org/event/>
- ◆ Putting Science into Standard (PSIS) workshop – Circular Technologies for construction industry
<http://www.cencenelec.eu/new-and-event/event/2023/2023-12-12-pis/>
- ◆ CECAR10 : <http://www.cecar10.org/>

§ IAC News Subscription §

The IAC News is one of the communication tools to share information and ideas with the members. We would like to invite you, your friends and colleagues to join the communication and to subscribe the IAC News. Please register online: (<http://www.jsce-int.org/node/150>). We look forward to meeting you.

§ IAC Facebook §

Recent activity of International Activities Center is introduced on this Facebook. Please see this home page (<https://www.facebook.com/JSCE.en>).

Comments and Questions

Please send us your feedback and comment to help us improve the IAC news. We look forward to hearing from you.
JSCE IAC: iac-new@jsce.or.jp