

2017-2020



THE UNIVERSITY OF DANANG
UNIVERSITY OF SCIENCE AND TECHNOLOGY

DANANG UNIVERSITY OF SCIENCE AND TECHNOLOGY
UTSUNOMIYA UNIVERSITY

WORKSHOP REPORT



In the summer of 2017, Danang University of Science and Technology and Utsunomiya University signed an agreement to strengthen academic exchanges between Japan and Vietnam. The agreement specifically set out to promote both friendly relations and academic exchange between the two universities.

From the first workshop held in 2018, the two universities hosted three workshops with a total participation of about 100 students from both universities. Held at Danang University of Science and Technology in Vietnam in 2018 and 2019 and at Utsunomiya University in Japan in 2020, the workshops aimed to strengthen technical and cultural exchanges between the two universities in the two countries.

Through this international exchange, faculty members and students alike acquired knowledge and experience beyond what the education system offers in their respective countries.

International exchange activities between the two universities will continue to be held in the future.

INTRODUCTION



CONTENTS

Urban Structure of Danang

Urban Structure of Utsunomiya

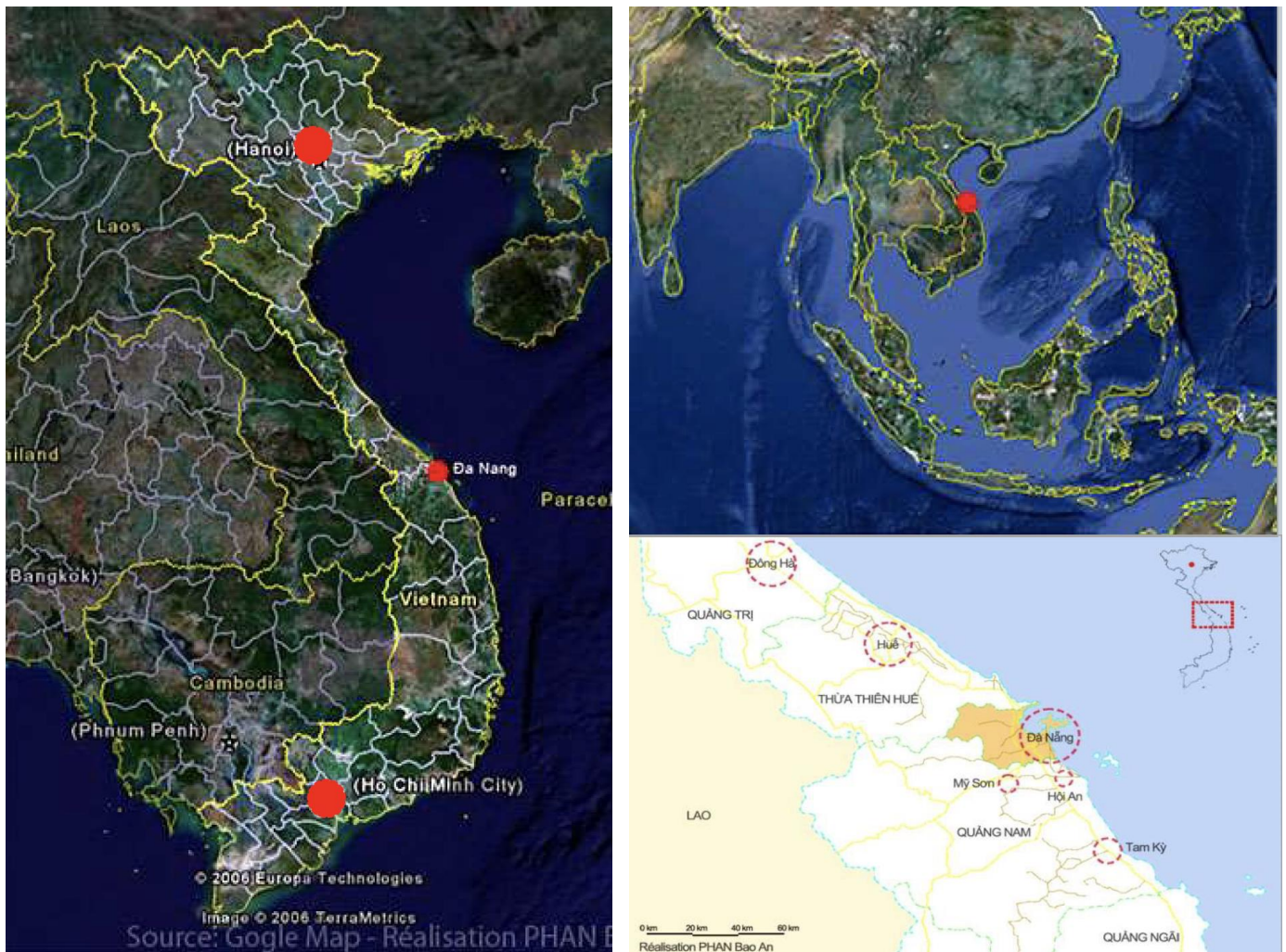
Workshops between DUT and UU



Urban Structure of Danang

1 Urban Structure of Danang

1-1 Location, Geography, and Climate



Danang is the fifth largest city in Vietnam, the largest city in central Vietnam, and one of the country's most important ports. Ringed by mountains on one side and the East Ocean on the other, the city borders Thua Thien-Hue Province across the Hai Van Pass to the north, Quang Nam Province to the south and west, and the ocean to the east. It is situated on the main supply route connecting Ha Noi 764 km to its south and Ho Chi Minh City 964 km to its north. The city has a total land area of 1,283.42 km², of which 241.51 km² are urban districts and 1,041.91 km² are rural districts.

Danang's warm weather and beaches attract a large domestic and international tourist population. The city has also been successful in attracting significant foreign investment and has developed a strong economic base in the service and industrial sectors. For these and other reasons, Danang has grown rapidly from a population of around 673,000 in 1997 to about 1 million in 2014 and is expected to see a two-fold increase in population to around 2 million by 2030.

1 Urban Structure of Danang

1-1 Location, Geography, and Climate

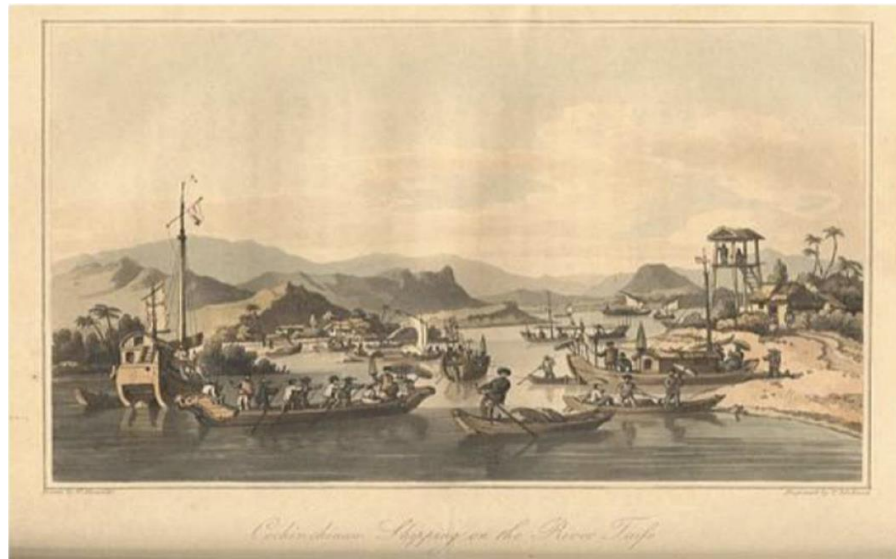


Danang has a tropical monsoon climate with two seasons: a typhoon and wet season from September to December and a dry season from January to August. The annual average temperature is around 26°C . Cold waves occasionally occur, but they do not last long. Temperatures are highest between June and August with mean temperatures of 28 to 30°C , and lowest between December and February (mean temperature of 18 to 23°C). In Ba Na Hills, temperatures are lower with an annual average of 20°C . The annual average humidity is 81% , with highs between October and January (reaching 84 – 86%) and lows between June and August (reaching 75 – 77%).

On average, Danang receives $2,153$ mm of rainfall. Rainfall is typically highest between September and November (ranging from 550 to $1,000$ mm) and lowest between February and April (ranging from 23 to 40 mm). The city also receives an annual average of $2,156$ hours of sunlight, ranging from as much as 234 to 277 hours per month in May and June to as little as 69 to 165 hours per month in November and December.

1 Urban Structure of Danang

1-2 History of Development of Danang



Gate of Hoi An River, 1800s



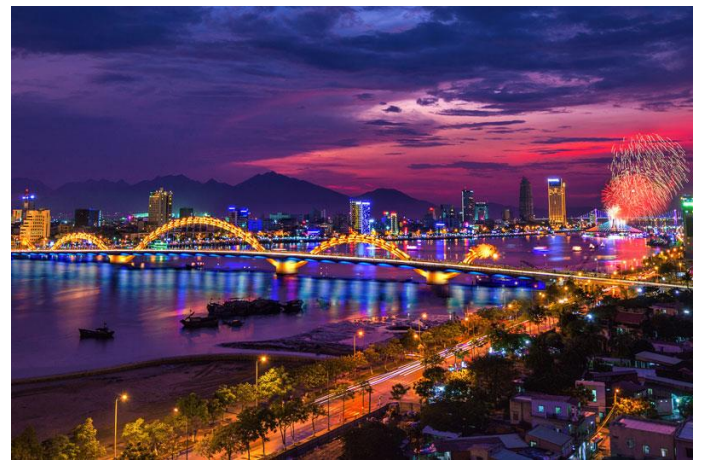
Han River Port, 1940s

During the Nguyen Dynasty (1802-1945), the government enacted a policy that limited trade with foreigners. Up until then, Hoi An was a crowded trading port with many shops operated by Chinese, Japanese and Western merchants. However, all foreign trade in Hoi An stopped in 1835, when King Minh Mang, the second king of the Nguyen Dynasty, forbade foreign trading ships from landing and trading anywhere in Vietnam except at the gate of the Han River in Danang. Danang appeared on the international maritime trade route for the first time then. There were a couple of reasons for this decision. That is, changing the port from Hoi An to Danang was seen to be advantageous, because Hoi An had only a small river that frequently tended to become filled with sand and could not accommodate large ships. Also, compared to Danang, Hoi An was farther from Hue, the capital of the kingdom, and was therefore more difficult to control.

Danang around this time was simply a fishing village on a road that led to Hue and some castles along the river.

1 Urban Structure of Danang

1-2 History of Development of Danang



In 1997, Danang became one of five municipalities in Vietnam. Municipalities are the highest-ranked cities in Vietnam, having the power to formulate its own development policies. During this time, however, the economy of Vietnam was weak, and there was little support from the central government. Danang had to get by with what resources it had at its disposal.

From 1997 to 2010, Danang formulated various urban planning policies. For example, to finance the construction of new roads, the city government devised a policy to expand the border of projects by at least 25m on each side, divide the newly-created spaces into small lots of around 4m × 25m and sell them to investors, so that the income from sales of the properties could be apportioned in part to the people who are relocated by the project, in part to the cost of constructing the new road, and in part to the city budget. This policy was first applied to the main road connecting Danang Airport with the city center.

Given the success in changing land use according to the infrastructure policy, the city government continues to apply it on a larger scale to renovate old residential areas. The renovation projects are supported by local people who desire to live inside the planned area. Danang is possibly unique in this respect among cities in Vietnam. People desire to live in planned areas, because the services and amenities are improved, including electric service, paved roads, schools, and health care centers.





Urban Structure of Utsunomiya

2 Urban Structure of Utsunomiya

2-1 Location, Geography, and Climate



Utsunomiya City, located in close proximity to Tokyo (approximately 100 km), is most famous for its gyoza (dumplings). It is also a highly attractive city where one can enjoy jazz and cocktails, and a mystical underground lake cruising at Oya, home of the Oya stone. The city is blessed with nature and fragrant with a culture that has developed over an 800-year long history from the middle ages. Recently, Utsunomiya has hosted major sports events such as the “Japan Cup Cycle Road Race” (Asia’s top one-day cycling road race) and “3×3 (three by three) World Tour Utsunomiya Masters” (3-person basketball international competition), and is gaining attention not only domestically, but also from around the world.

In a private investigation, Utsunomiya City has ranked number one in the country as a place that is easy to live in. It was selected for the comfortable lifestyle it offers, and garnered comments that it is also a number one city for working parents who are raising children (among cities with 500,000 people or more in 2017). Presently, action is being taken to establish the first new domestic next-generation light rail transit (LRT) system under the slogan of “Utsunomiya: City of the Future,” as Utsunomiya continues to develop as the largest city in the Kita Kanto region where commerce and industry and financial functions accumulate.

2 Urban Structure of Utsunomiya

2-1 Location, Geography, and Climate



Utsunomiya is located in south-central Tochigi Prefecture in the northern Kanto plains, approximately 100 km north of Tokyo. The historic town of Nikko is approximately 25 km northwest of Utsunomiya. The average altitude of the city is 100 metres.

Utsunomiya has a humid subtropical climate with hot and humid summers and cool winters. Precipitation is heavy in the summer wet season, especially from July to September, and it is noticeably drier in the winter months from December to February.

During the Edo period, the Utsunomiya area was ruled by a succession of daimyo clans under the Utsunomiya Domain, and prospered from its location at the junction of Nikko Kaido and Oshu Kaido, two major routes that radiated from Edo (Tokyo). During the Boshin War that occurred in the Bakumatsu period, the Battle of Utsunomiya Castle was a major conflict in the northern Kanto area. Following the Meiji Restoration, Utsunomiya was briefly (1871–1873) part of Utsunomiya Prefecture, which was thereafter merged into the new Tochigi Prefecture, and became the capital of the prefecture in 1884.

With the establishment of the municipalities system on April 1, 1889, the city of Utsunomiya was officially established. At the end of 1889, Utsunomiya had a population of 30,698, making it the third most populous municipality in the Kanto area after Tokyo and Yokohama.

The city limits were expanded from 1951 to 1955 by annexing neighboring Suzumenomiya town and Hiraishi, Yokokawa, Mizuhono, Kunimoto, Shiroyama, Tomiya, Toyosato, and Sugatagawa villages and a part of Shinoi village from the Kawachi district and Kiyohara village from the Haga district. In 1996, Utsunomiya was designated a core city with increased autonomy. On March 31, 2007, it absorbed the towns of Kamikawachi and Kawachi (both from the Kawachi district), pushing the population of Utsunomiya City to over 500,000.

Page1 Source: Lonely Planet

“Two days in Danang: from the Golden Bridge to the Marble Mountains” aid-back Danang offers everything from grand bridges to tacos on the beach © Kim Mott / Lonely Planet

URL: <https://www.lonelyplanet.com/articles/two-days-danang>

Page2 Source: Utsunomiya University

URL: <https://portraits.niad.ac.jp/faculty/campus-facilities/0156/0156-1K01-01-01.html>

Page3 Source: Hotels.com

URL: <http://www.vietnam-guide.com/da-nang/>

Page4 Source: Google Map (Editor: PHAN Bao An)

Page5 Source: Left side: Wikipedia “Map of Tourane (Da Nang) found in the home of a mandarin of the Vietnamese military in 1859 (part 1). The map itself is at right, with annotations in Sino-Vietnamese script; a legend is at left, written in French.”

URL: <https://www.flickr.com/photos/13476480@N07/5996296144/>

Right side: Hanoi journey

“Bánh xèo – the unique pancake of Vietnamese cuisine”

URL: <https://hanoijourney.com/banh-xeo-unique-pancake-vietnamese-cuisine/>

Page6 Source: HCM-EDU “Gate of Hoi An River, 1800s”

URL: <http://thcsnguyenduc1.hcm.edu.vn/lich-su/su-7-bai-23-kinh-te-van-hoa-the-ki-xvi-xviii-i-kinh-te-c44168-104704.aspx>

YEUDANANG.org “Han River Port, 1940s

URL: <https://yeudanang.biz/nhin-lai-thanh-pho-da-nang-ngay-xua.html>

Page7 Source: upper left: Lonely Planet

“Two days in Danang: from the Golden Bridge to the Marble Mountains” aid-back Danang offers everything from grand bridges to tacos on the beach © Kim Mott / Lonely Planet

URL: <https://www.lonelyplanet.com/articles/two-days-danang>

lower left: PATA “Hello Vietnam: Vietnam’s new tourism icon-the Danang golden bridge”

URL: <https://www.pata.org/hello-vietnam-vietnams-new-tourism-icon-the-danang-golden-bridge/>

upper right: IMLTravel

URL: <https://www.imltravel.com/packages/vietnam-tour/da-nang-city-vietnam-jpg-new/>

lower right: Asia Master Tours

URL: <http://www.asiamastertours.com/destinations/da-nang/>

Page8 Source: Utsunomiya City

URL: <https://www.city.utsunomiya.tochigi.jp/>

Page9 Source: Utsunomiya Station, Author: Fumihiko Ueno

URL: <https://web.archive.org/web/20161015184945/http://www.panoramio.com/photo/37232743>

Page10 Source: Utsunomiya City

URL: <https://www.city.utsunomiya.tochigi.jp/kurashi/kotsu/lrt/>

URL: https://www.city.utsunomiya.tochigi.jp/foreign_language/english/index.html

Page11 Source: JapanTravel

“Utsunomiya Futaarayama Shrine”

URL: <https://en.japantravel.com/tochigi/utsunomiya-futaarayama-shrine/24154>

“Utsunomiya Futaarayama Shrine”

URL: <https://en.japantravel.com/tochigi/utsunomiya-futaarayama-shrine/24154>



Content of the Workshops between DUT and UU

3 Workshops between DUT and UU

3-1 Background

In 2017, Danang University of Science and Technology (DUT) and Utsunomiya University (UU) signed an agreement to promote friendship and academic exchange between the two universities. Based on to this agreement, the 1st and 2nd joint workshops between DUT and UU were held at DUT in March 2018 and March 2019, and the 3rd joint workshop was held at UU in February 2020.

Students and faculty members who participated in the program were expected to share knowledge, create friendships, and exchange ideas related to the development of infrastructure in Japan and Vietnam.

Sponsorship

- Utsunomiya University, Japan
(Project of International Collaborative Education Support of Utsunomiya University)
- Danang University of Science and Technology, Vietnam
- Sakura Science Exchange Program, Japan Science and Technology Agency (JST), Japan (For the 3rd program)

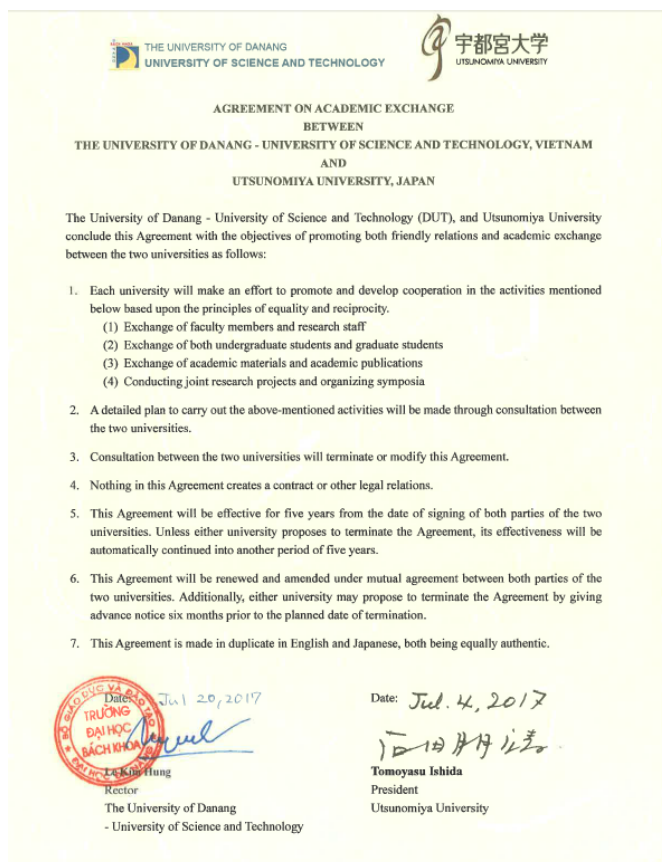


3 Workshops between DUT and UU

3-1 Background



Meeting for agreement between UU and DUT,
Danang City, 2016



Agreement between UU and DUT, signed on July 2017

3 Workshops between DUT and UU

3-2 Zero Project



Planting trees at Danang University of Science and Technology

General international education program on “Creative design of material and volunteering to support international activities” between Utsunomiya University and Danang University of Science and Technology

With the aim of linking and promoting exchanges between Polytechnic University, Danang University and Utsunomiya University, this program was held from September 22 to 25, 2014, as a combination of the Technical Innovation Program and the Zero Project of Utsunomiya University’s Technical Sector, which have been implemented in many countries around the world. As part of the exchange activities, the delegation also held a meeting with students of the Faculty of Architecture on September 24 for a discussion on the topic “Studying architecture in Japan.”

- Persons in charge:

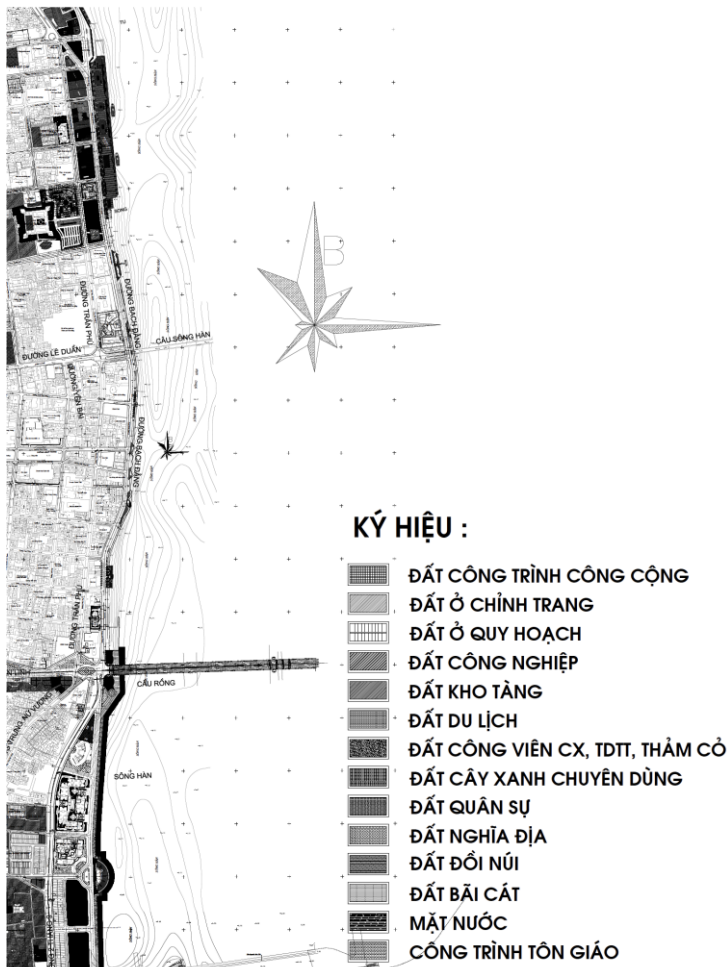
+ Japan: Prof. Yokota, Prof. Mitsuhashi

+ Vietnam: Mr. Nguyen Xuan Trung, Asso. Prof. Lê Thi Kim Oanh

3 Workshops between DUT and UU

3-3 The 1st Joint Workshop between DUT and UU

3-3-1 Background

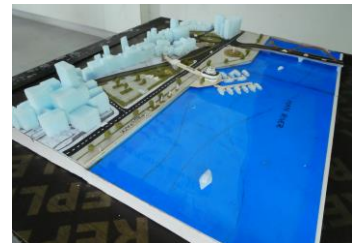
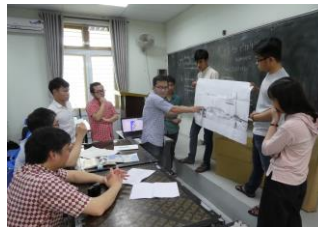


Based on the agreement signed by Danang University of Science and Technology (DUT) and Utsunomiya University (UU) to promote friendship and academic exchange between the two universities, the 1st joint workshop was held in March 2018 to realize both friendly relations and academic exchange, with the participation of researchers and students interested in sharing knowledge and exchanging ideas especially related to the development of infrastructure and architecture in Japan and Vietnam.

The workshop was held at Danang University of Science and Technology, Vietnam. As a fusion workshop of civil engineering and architecture, it was themed on the topic of “Idea for river-oriented transportation and architecture for future Danang city”. After carrying out an interdisciplinary survey, the students discussed a “new ecology” among nature, urbanism and architecture for human activities in future Danang city.

3 Workshops between DUT and UU

3-3 The 1st Joint Workshop between DUT and UU



3 Workshops between DUT and UU

3-3 The 1st Joint Workshop between DUT and UU

3-3-2 Content of the Workshop



Date	Content
12 th March 2018	Arrive at Danang Airport and check in to hotel
13 th March 2018	Orientation of workshop Grouping, self-introduction and exchange between students and faculty members Field survey
14 th March 2018	Workshop hosting ceremony Keynote by faculty members from the two universities Workshop
15 th March 2018	Work confirmation and advice by faculty members Workshop by students
16 th March 2018	Prepare for the presentation Presentations of workshop achievements Closing ceremony
17 th March 2018	Visit to Hue Depart from Danang Airport



3 Workshops between DUT and UU

3-3 The 1st Joint Workshop between DUT and UU

3-3-3 Keynote Lectures



Keynote Lectures, 2018.3.14 at DUT

Keynote 1: Transportation Planning for Safe and Comfortable Streets
(Prof. Nobuaki Ohmori)

Keynote 2: About urban and traffic planning of DaNang city (DUT)

Keynote 3: Architectural Design, Townscape and Human Activities along Urban Rivers
(Assoc. Prof. Akio Yasumori)

Keynote 4: About history and trends of Vietnamese architecture (DUT)

Keynote 5: Creating Universal Design and Barrier-free Environment
(Mr. Yoshito Dobashi)

3 Workshops between DUT and UU

3-3 The 1st Joint Workshop between DUT and UU

3-3-4 Output of Team 1


宇都宮大学
UTSUNOMIYA UNIVERSITY

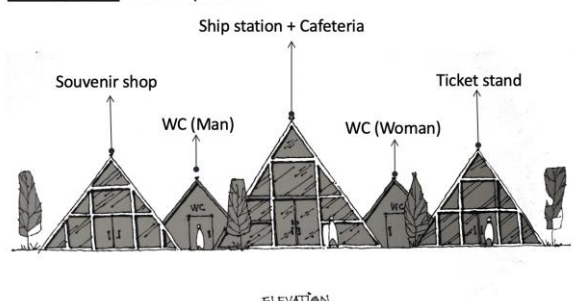
Presentation of workshop

GROUP 1

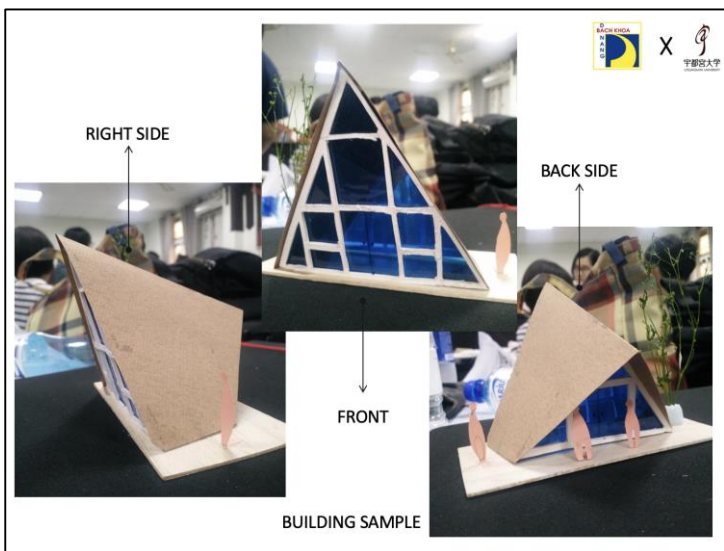
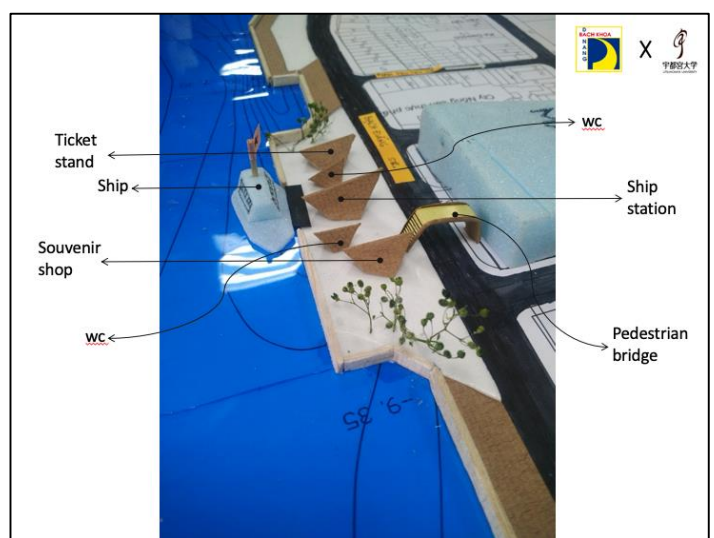
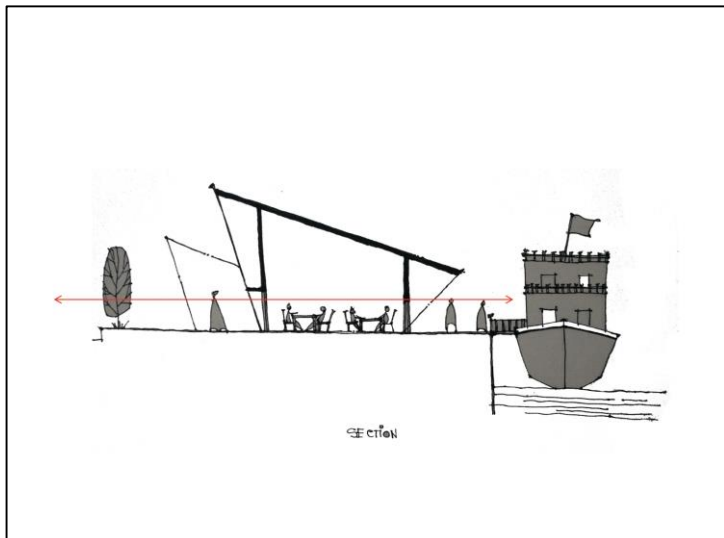
- Tran Phuoc Bao Thu
- Phan Thai Hien
- Tran Le Anh Huy
- Kasai Kohei
- Saito Hikaru

Architecture proposal

IDEA CONCEPT for the Ship station



ELEVATION



3 Workshops between DUT and UU

3-3 The 1st Joint Workshop between DUT and UU

3-3-5 Output of Team 2

TEAM 2

TAKAHIRO MARUYAMA

DIEP LE

KODAI WATANABE

THAO PHUNG

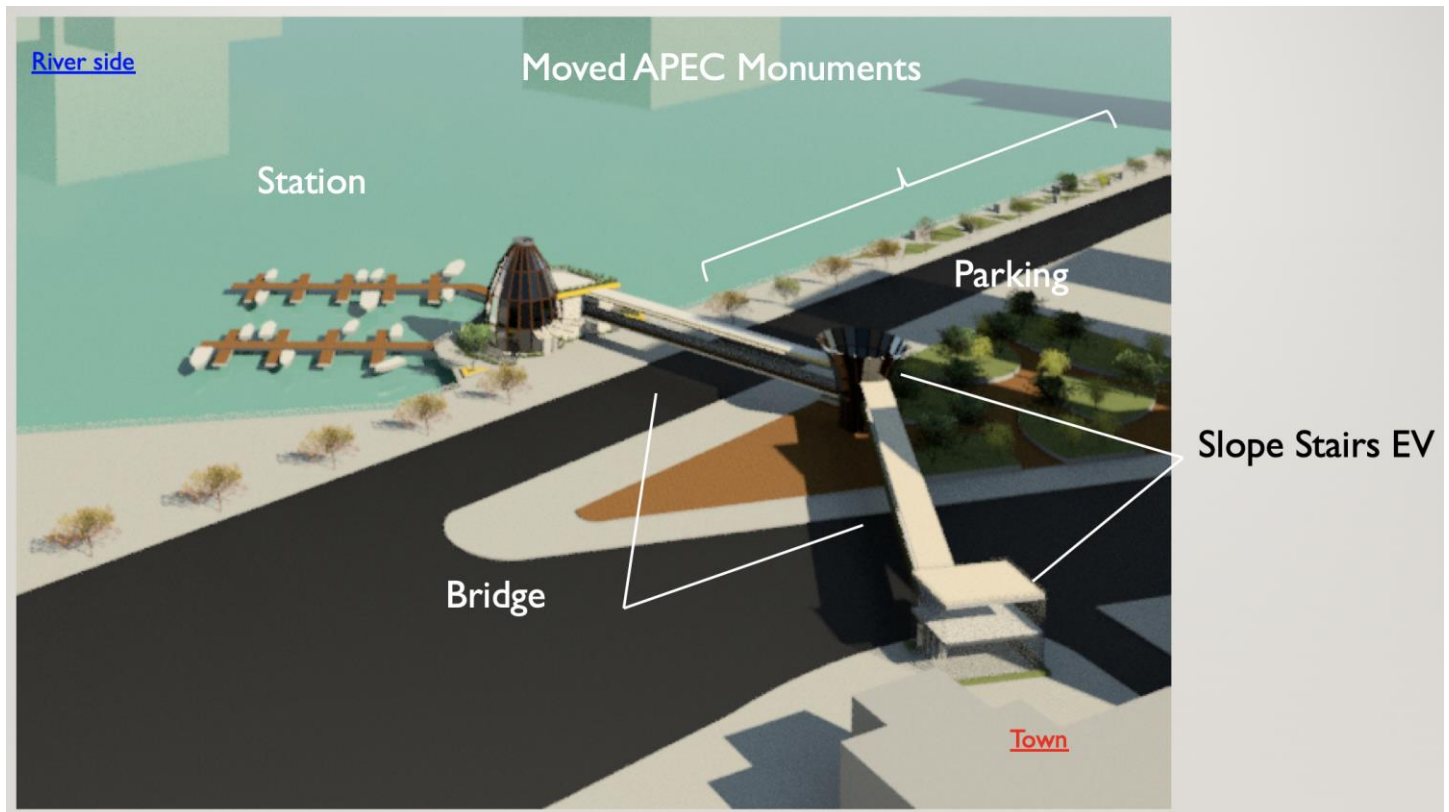
GIANG NGUYEN

SY TRAN

TRANSPORT DESIGN OF AREA SURROUNDING THE BOAT STATION

- We build a Boat station on the river.
- APEC's Park is moved to a place along the river. (Opening space).
- We design overpass (walking bridge) to connect to the boat station and connect town's side to river's side.
- Parking area is designed near by the Boat station.

川側 (station) と町側 (museum) を繋げるA



Transport design of area surrounding the boat station

The design aims to protect the priority of pedestrians in current traffic.

Universal design is promoted by creating facilities in the parking area for seniors and people with disabilities.



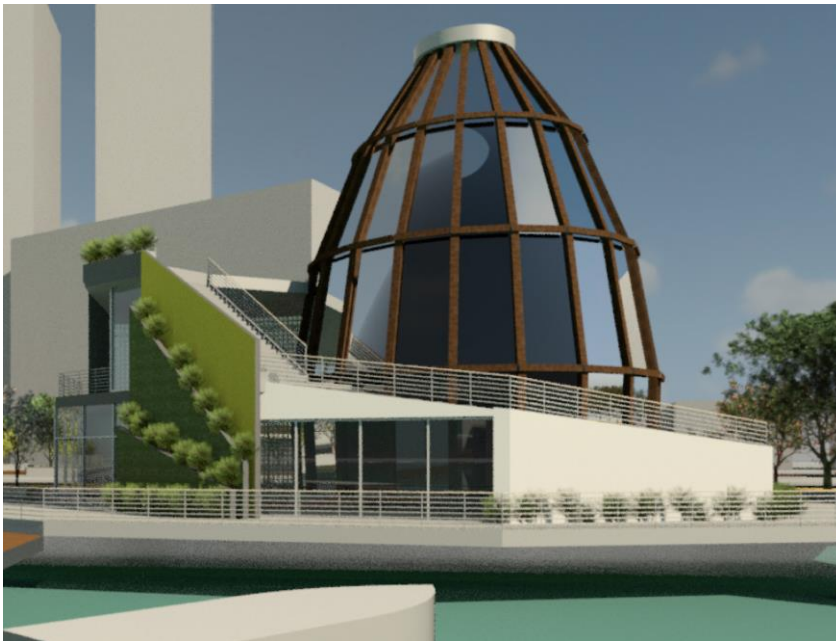
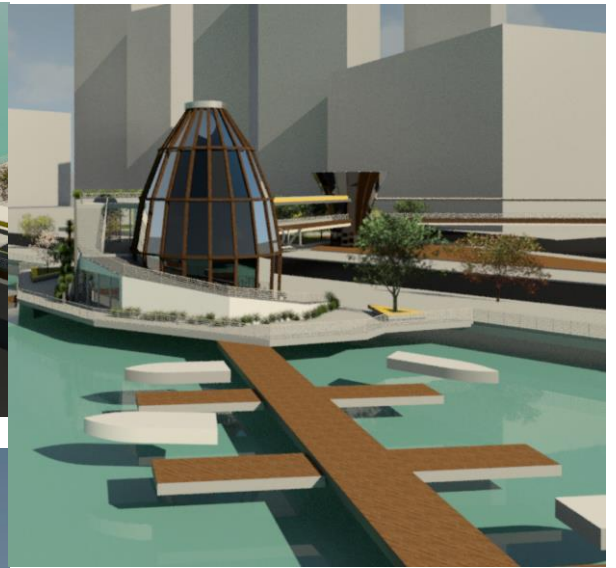
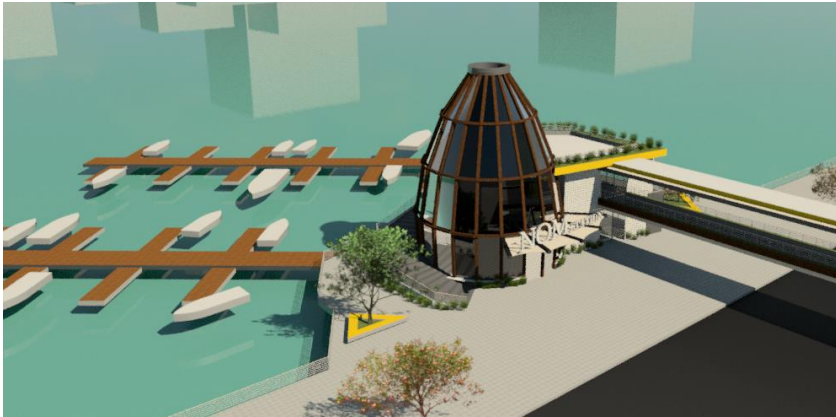
Motif : Tool of catching fishes, Light shell



3 Workshops between DUT and UU

3-3 The 1st Joint Workshop between DUT and UU

3-3-5 Output of Team 2



Advantages

- This area serves as a base for triggering activities along the river and increasing value.
- By increasing the number of parking lots, the traffic jam in front of Cham Museum can be reduced.
- The station will become one of the symbols of Danang City!

Problems

- Forming a consensus about the triangle site and the relocation of the monument could be a problem.
- Is it possible to pay investment money and achieve sustainable operation?
- How can a tour be planned that includes this area?

3 Workshops between DUT and UU

3-3 The 1st Joint Workshop between DUT and UU

3-3-6 Output of Team 3

New port station and New transportation system

Team3

Lap,Han,Tan,Vu,Natsumi,Takeru

General Plan



1.Walking across the street



Walking across Viet Nam street is so danger.

How to improve:

Make tunnels underground for walking.



Summary



Car parking underground



blue line is the location of tunnel



Entrance and exit



Motorbike parking underground



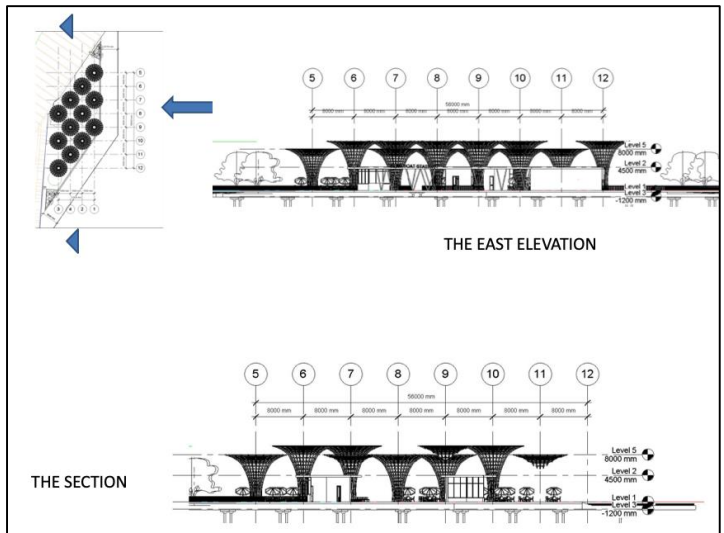
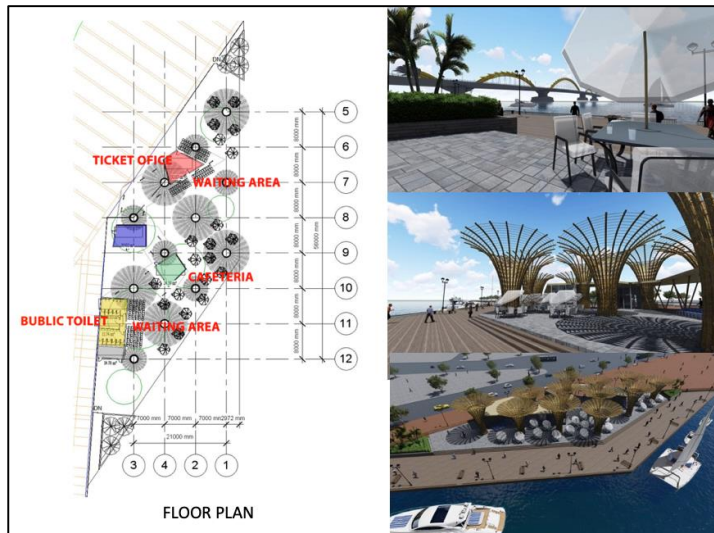
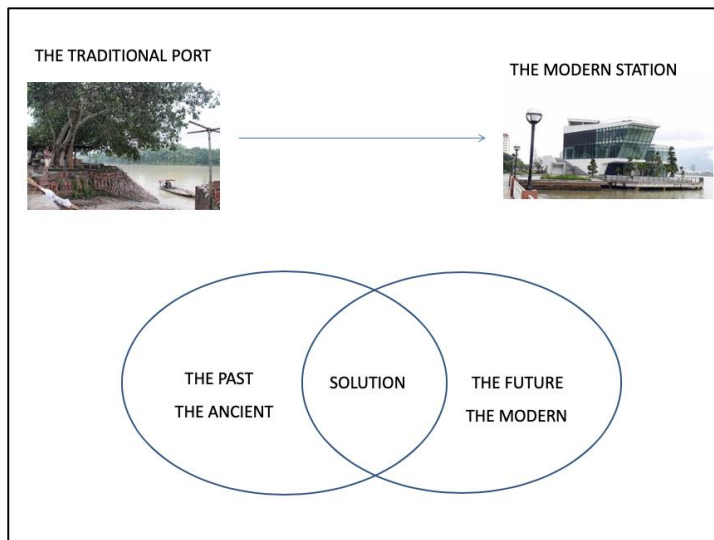
Share bicycle station



3 Workshops between DUT and UU

3-3 The 1st Joint Workshop between DUT and UU

3-3-7 Output of Team 4



3 Workshops between DUT and UU

3-4 The 2nd Joint Workshop between DUT and UU

3-4-1 Background

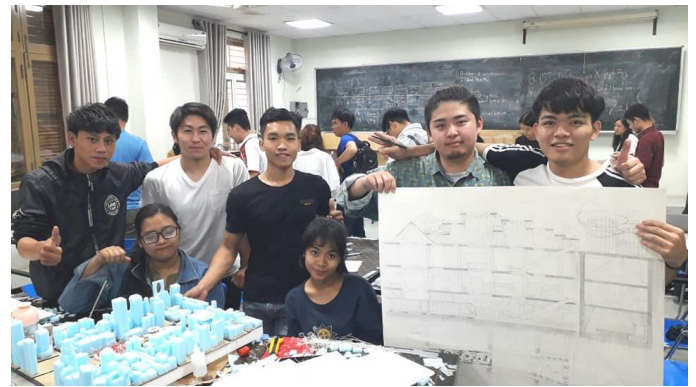
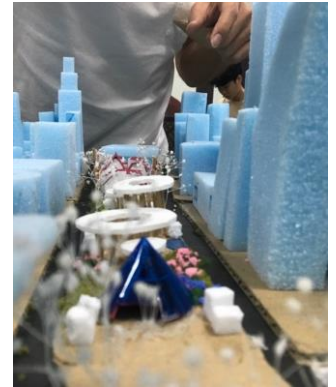
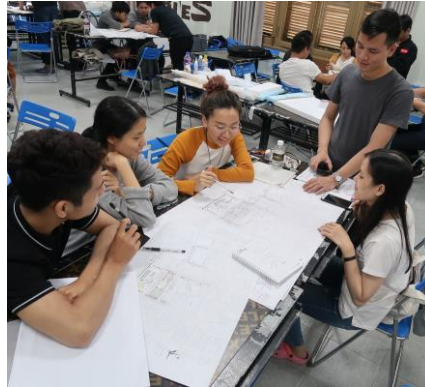


Based on the agreement signed by Danang University of Science and Technology (DUT) and Utsunomiya University (UU) to promote friendship and academic exchange between the two universities, the 2nd joint workshop was held in March 2019, once again at Danang University of Science and Technology, Vietnam.

As a fusion workshop of civil engineering and architecture, it was themed on the topic of “Architecture Design of Metro Station and Transportation Design of Surrounding Area in Danang City”. After carrying out an interdisciplinary survey, the students discussed a “new ecology” among nature, urbanism and architecture for human activities in future Danang city. As hoped, the workshop promoted student exchange and mutual understanding between the two universities.

3 Workshops between DUT and UU

3-4 The 2nd Joint Workshop between DUT and UU



3 Workshops between DUT and UU

3-4 The 2nd Joint Workshop between DUT and UU

3-4-2 Content of the Workshop



Date	Content
3 rd March 2019	Arrive at Danang Airport and check in to hotel Visits to Hoi An and various places in Danang City
4 th March 2019	Workshop hosting ceremony and orientation of workshop Grouping, self-introduction and exchange between students and faculty members Field survey
5 th March 2019	Workshop Organize survey results and discuss suggestions for transportation and architecture
6 th March 2019	Joint symposium Workshop Work confirmation and advice by faculty members
7 th March 2019	Complete the suggestions Prepare for the presentation
8 th March 2019	Prepare for the presentation Presentations of workshop achievements Closing ceremony Party Free time



3 Workshops between DUT and UU

3-4 The 2nd Joint Workshop between DUT and UU

3-4-3 Joint Symposium



Joint Symposium, 2019.3.6 at DUT

Presenter 1: Dr. Le Phong Nguyen

- A methodology for evaluating urban pedestrian accessibility with respect to walking resistance and public transport usage

Presenter 2: Dr. Associate Prof. Akio Yasumori

- Spatial Design and Connection between Under and Above Ground on Metro Station

Presenter 3: Dr. Hai Do, Duy Nguyen, Vy Tran

- Reliability Analysis of hammer piers in bridges

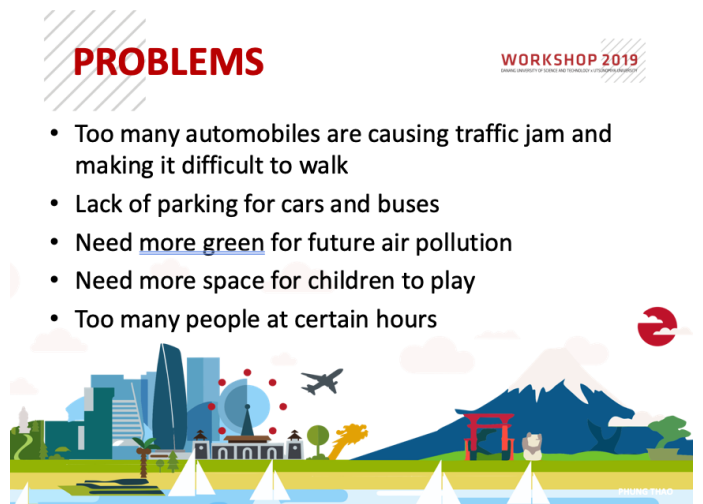
Presenter 4: Dr. Nguyen Minh Hai

- Outline of Utsunomiya University and Research activities of Structural engineering Laboratory

3 Workshops between DUT and UU

3-4 The 2nd Joint Workshop between DUT and UU

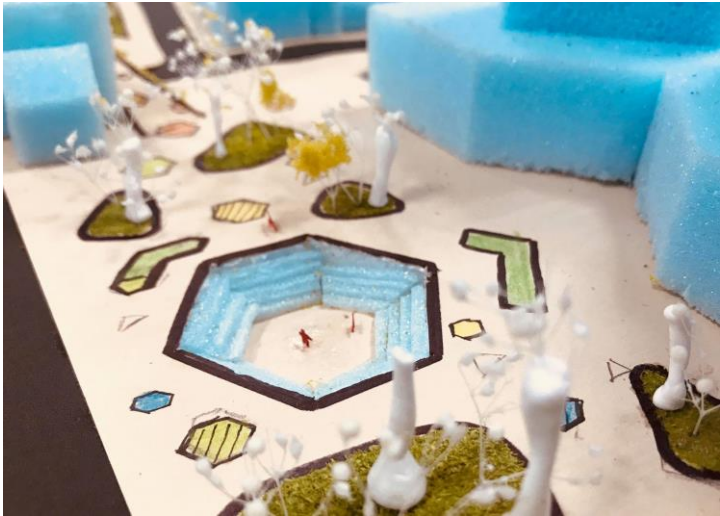
3-4-4 Output of Team 1



3 Workshops between DUT and UU

3-4 The 2nd Joint Workshop between DUT and UU

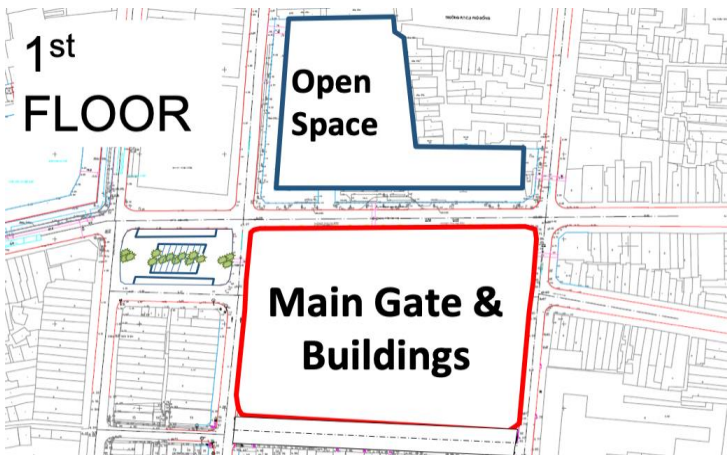
3-4-4 Output of Team 1



3 Workshops between DUT and UU

3-4 The 2nd Joint Workshop between DUT and UU

3-4-5 Output of Team 2



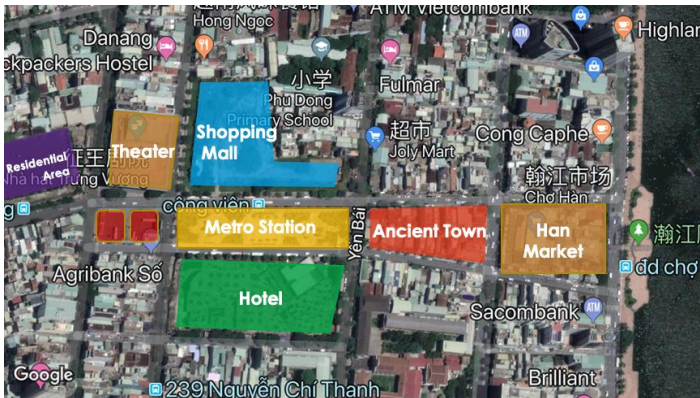
Advantages

1. It creates a lot of public space for people
2. It gives people a direct approach (by seeing through the train from the stairs)
3. LWT:
 - Local labor: economy increases
 - Walking: people will tend to walk more
 - Tourism: tourism will develop

3 Workshops between DUT and UU

3-4 The 2nd Joint Workshop between DUT and UU

3-4-6 Output of Team 4



Danang Fun City	
Type	Mixed-use development
Site area	N/A
Total GFA	280,000 sq m
Retail GFA	90,000 sq m
Hotel GFA	70,000 sq m
Station GFA	30,000 sq m
Retail floor	5/F above ground and 2 basements
Level	Middle grade
Target consumers	Nearby residents/families
Parking lot	Car: 700 Motorcycle: 800
Metro	Direct metro access

3 Workshops between DUT and UU

3-4 The 2nd Joint Workshop between DUT and UU

3-4-7 Output of Team 5



“ABOVE AND UNDER”

A blend between above and under.

There is no barrier.

The area is open to everyone.

- Open spaces
- Community gathering
- Connection between multiple levels
- Broad visibility
- Encourage walking
- City landmark



To make drivers park on the parking area.

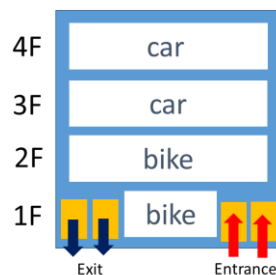


The drivers can drive comfortably in streets.

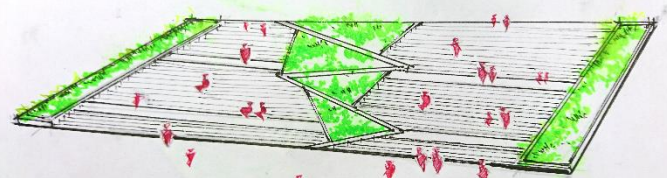
Entrance and Exit are each two gates



The drivers can park smoothly.



Stairs and Slopes



We connect platform to ground gently, so everyone can access platform.

This place is opened to the citizen and metro users.

NOW

Many vehicles are parked on the street.

Traffic jams are caused.

We feel danger when we walk by the street.



Image. parking

Future

To promote drivers to park on the parking area or rotary



It's expected that it's smooth to improve to mobility and make sure that pedestrians are safe .



Image. rotary

3 Workshops between DUT and UU

3-5 The 3rd Joint Workshop between DUT and UU



3 Workshops between DUT and UU

3-5 The 3rd Joint Workshop between DUT and UU

3-5-1 Background



Based on the agreement signed by Danang University of Science and Technology (DUT) and Utsunomiya University (UU) to promote friendship and academic exchange between the two universities, the 3rd joint workshop was held for the first time in Japan at UU in February 2020. Students and faculty members who participated in the program were expected to share knowledge, create friendships, and exchange ideas related to the development of infrastructure in Japan and Vietnam.

As a common theme for the interdisciplinary study fields of civil engineering, architecture and regional design, the focus of the workshop (main activity of the program) was “Urban Design of Smart City Utsunomiya ~The LRT Station and Its Environs~”. After carrying out an interdisciplinary survey, the students discussed a “new ecology” among nature, urbanism and architecture for human activities in future Utsunomiya City.

3 Workshops between DUT and UU

3-5 The 3rd Joint Workshop between DUT and UU

3-5-2 Content of the Workshop



Date	Content
16 th February 2020	Arrive at Narita Airport Travel from Narita to Utsunomiya Brief tour of Utsunomiya City and check in to hotel
17 th February 2020	Workshop hosting ceremony and orientation of workshop Grouping, self-introduction and exchange between students and faculty members Lecture about the LRT project Field survey and discussion on-site Welcome party
18 th February 2020	Workshop Organize survey results and discuss suggestions for transportation and architecture Exchange workshop between faculty members from the two universities
19 th February 2020	Pre-presentation Workshop Complete the suggestions and prepare for the presentation
20 th February 2020	Prepare for the presentation Presentations of workshop achievements Award and closing ceremony Exchange party
21 st February 2020	Visit to Tokyo Check in to hotel



3 Workshops between DUT and UU

3-5 The 3rd Joint Workshop between DUT and UU

3-5-3 Workshop Hosting Ceremony and Field Survey



The 3rd joint workshop of DUT and UU was held at Utsunomiya University. During the morning of February 16th, an opening ceremony was held at the Yoto campus of Utsunomiya University. First, Professor Ohmori introduced the content and goals of the workshop, and Associate Professor Yasumori introduced the project investigation background of this workshop so that students could better understand the objectives of the investigation. Second, as the winner of the second workshop, Han reviewed the design results of last year's workshop. Finally, members from Utsunomiya City Government introduced the background and current situation of the survey content more thoroughly.

In the afternoon of that day, students and faculty members from Utsunomiya University and Danang University of Science and Technology participated in a field survey and collected detailed field data for the next design.

3 Workshops between DUT and UU

3-5 The 3rd Joint Workshop between DUT and UU

3-5-4 Welcome Party



In the evening of February 16th, faculty members and students from the two universities attended a welcome party for the workshop. At the venue, they enjoyed a taste of Utsunomiya's local specialty – gyoza. Utsunomiya gyoza is an important part of the culinary culture of Utsunomiya City, Tochigi Prefecture, where a large number of gyoza dumpling restaurants can be found.

3 Workshops between DUT and UU

3-5 The 3rd Joint Workshop between DUT and UU

3-5-5 Joint Seminar



Joint Seminar, 2020.2.18 at UU

Presentation 1

Prof. Satoshi Yamaoka

- Advanced technology for maintenance of water distribution systems

Presentation 2

Dr. Do Viet Hai and Vy Tran

- Reliability analysis of the steel bridge girders strengthened with CFRP considering the effect of adhesive layer

Presentation 3 Assoc. Prof. Nguyen Anh Tuan

- Building energy simulation under uncertainty of climate change in the future

Presentation 4 Assis. Prof. Kisa Fujiwara

- Research and education in the field of architectural environment of Tochigi

3 Workshops between DUT and UU

3-5 The 3rd Joint Workshop between DUT and UU

3-5-6 Output of Team 1



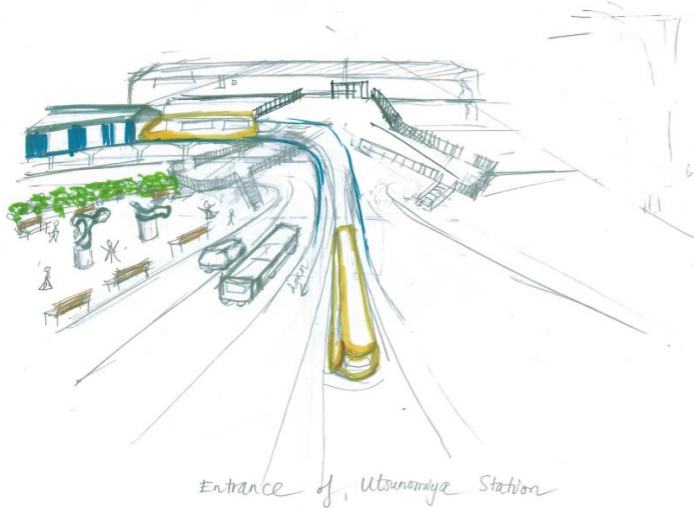
Title:

“Making people gathering spaces and enabling people to connect with nature”

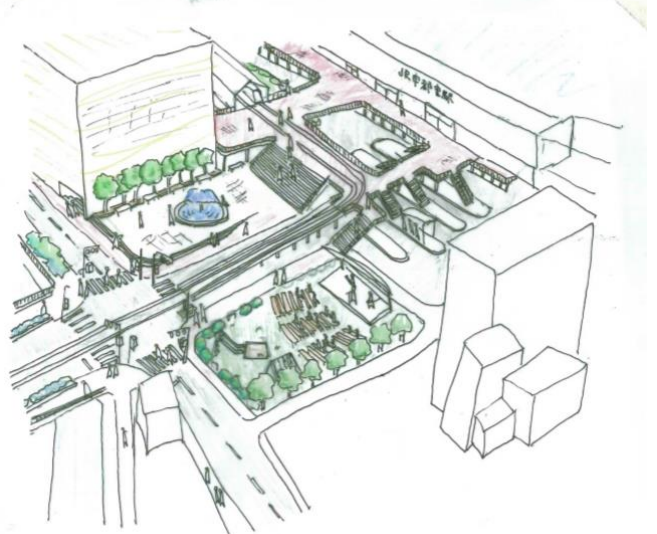
Concept:

Our concept is “pedestrian first”.

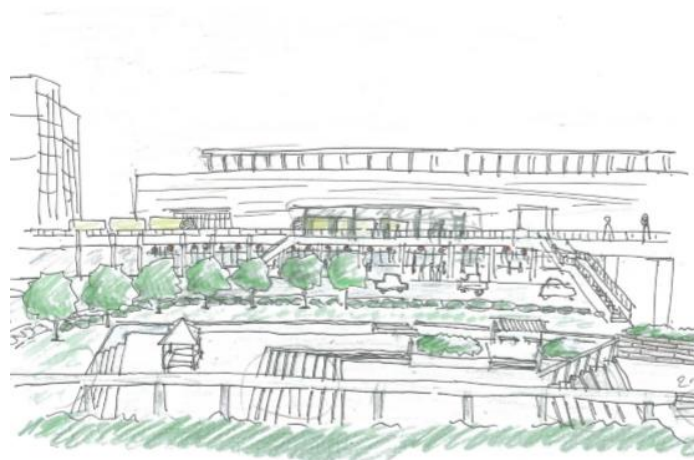
People actively use public transportation to reduce the use of private cars, so pedestrian safety is ensured. Open spaces and public spaces are also designed to allow pedestrians to connect with nature.



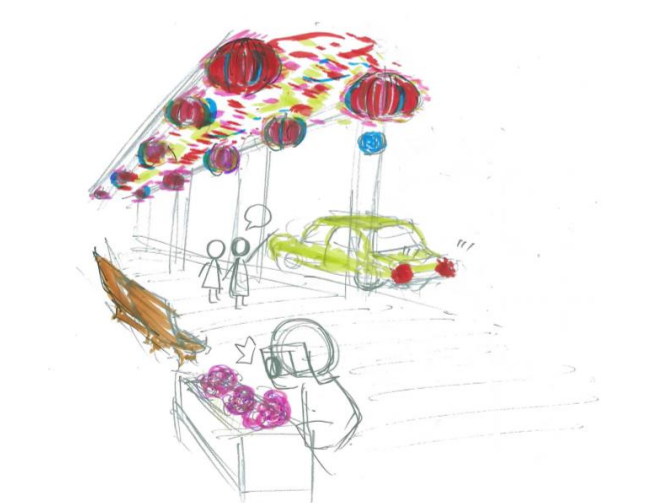
Entrance to Utsunomiya station



Increase open spaces



Park for relaxation

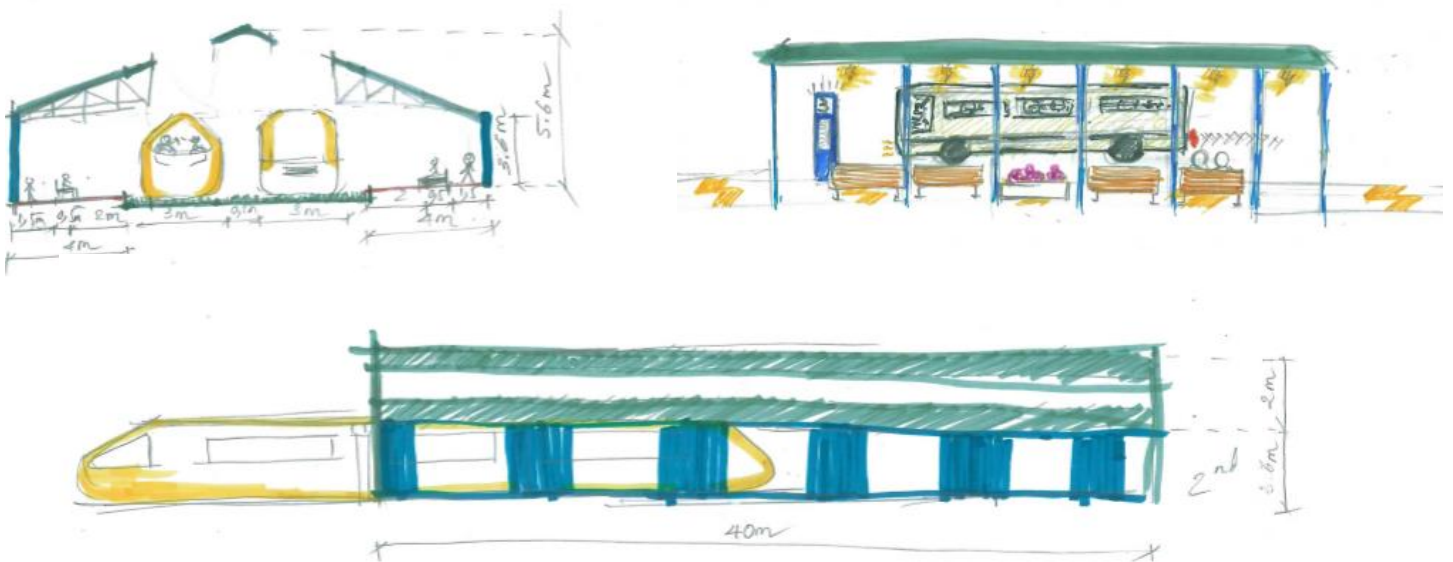


Japanese lanterns

3 Workshops between DUT and UU

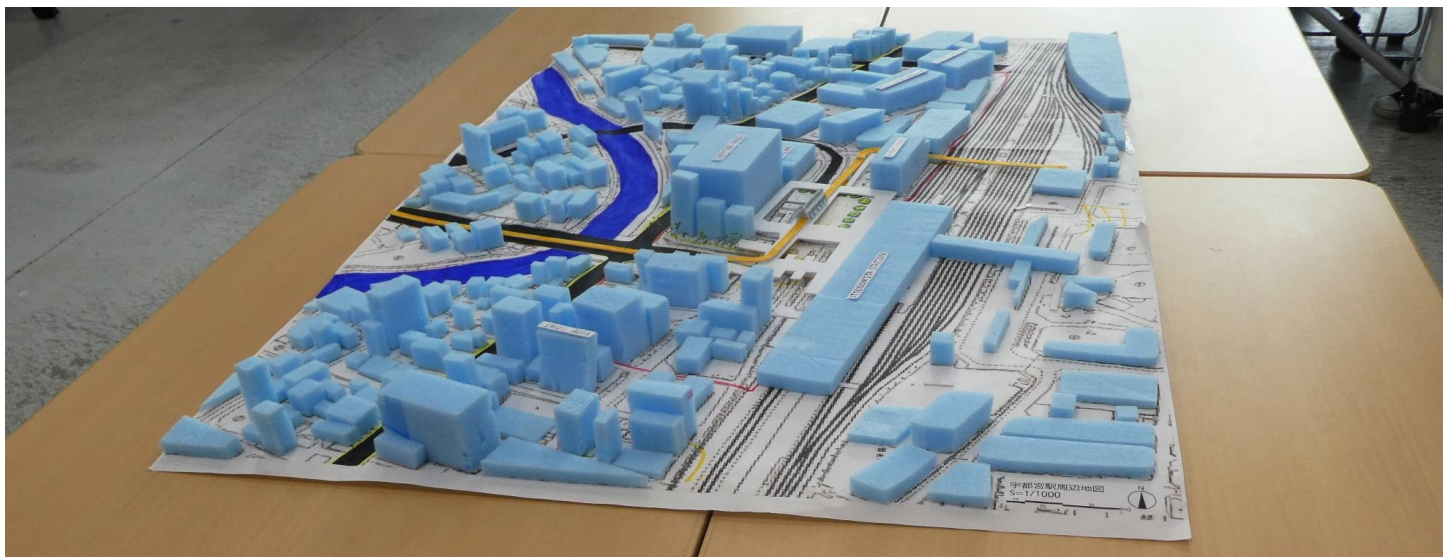
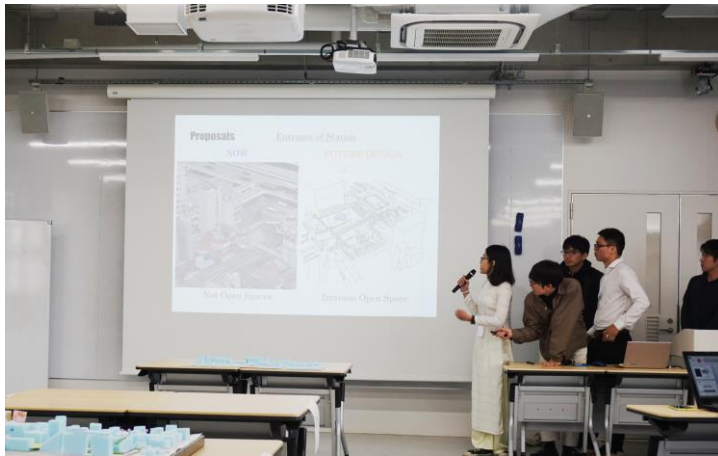
3-5 The 3rd Joint Workshop between DUT and UU

3-5-6 Output of Team 1



LRT station

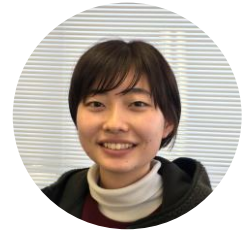
LRT platform and bus stop



3 Workshops between DUT and UU

3-5 The 3rd Joint Workshop between DUT and UU

3-5-7 Output of Team 2



Title:

“A city where you can feel nature”

Concept:

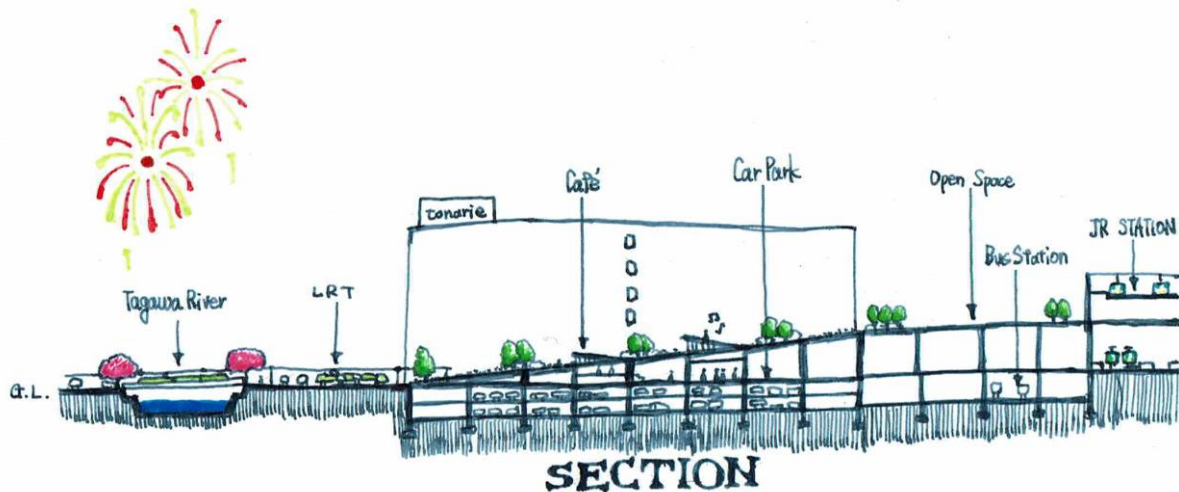
Our proposal can make Utsunomiya City attractive.
People can enjoy cherry blossoms, fireworks festivals,
autumn leaves, illumination in this city with LRT!



1st floor plan of Utsunomiya station



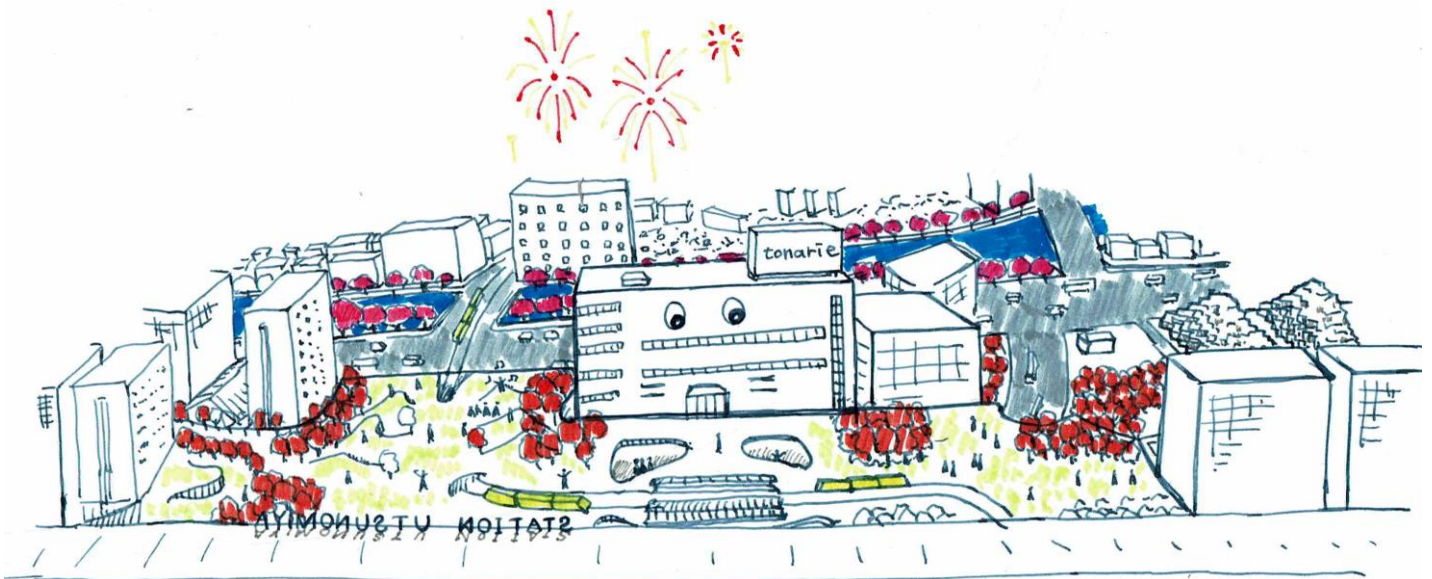
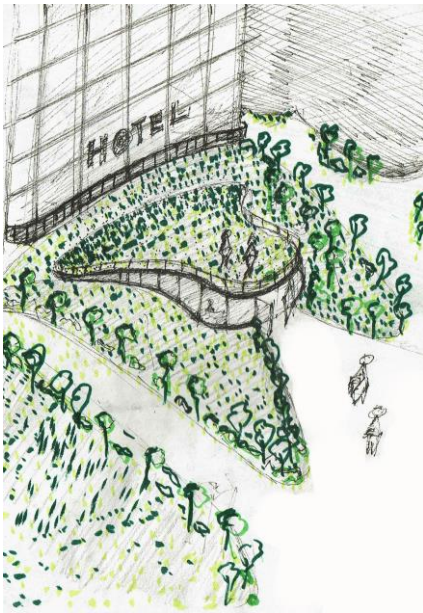
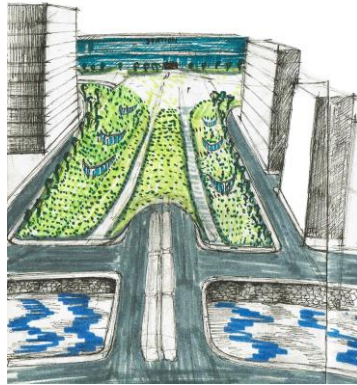
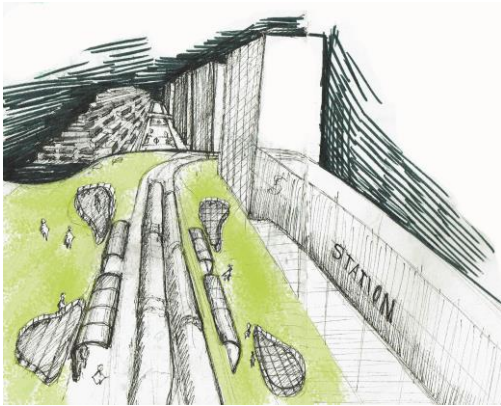
2nd floor plan of Utsunomiya station



3 Workshops between DUT and UU

3-5 The 3rd Joint Workshop between DUT and UU

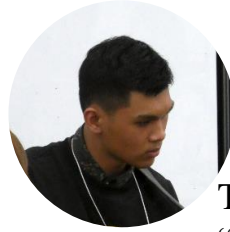
3-5-7 Output of Team 2



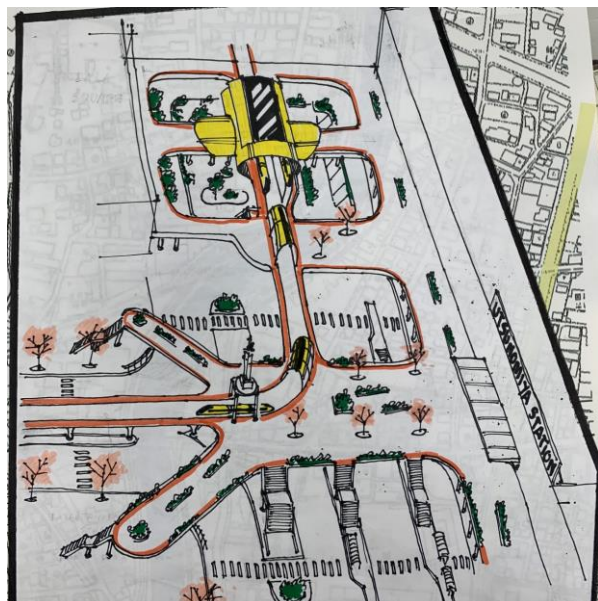
3 Workshops between DUT and UU

3-5 The 3rd Joint Workshop between DUT and UU

3-5-8 Output of Team 3



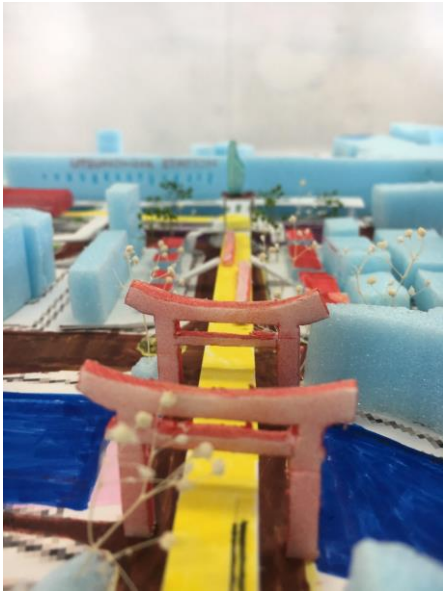
Title:
“LIGHT OF FUTURE”



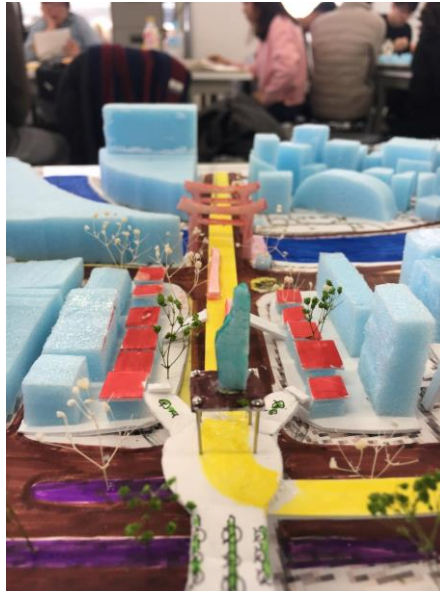
3 Workshops between DUT and UU

3-5 The 3rd Joint Workshop between DUT and UU

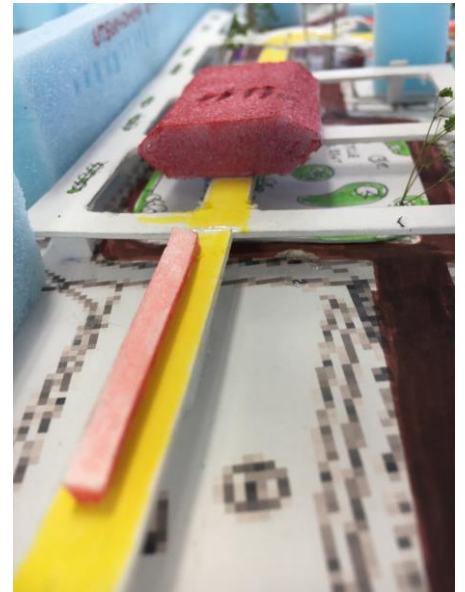
3-5-8 Output of Team 3



View from the bridge



View from the station



Shape of the LRT station



3 Workshops between DUT and UU

3-5 The 3rd Joint Workshop between DUT and UU

3-5-9 Output of Team 4



Title:
“Green station”

Concept:

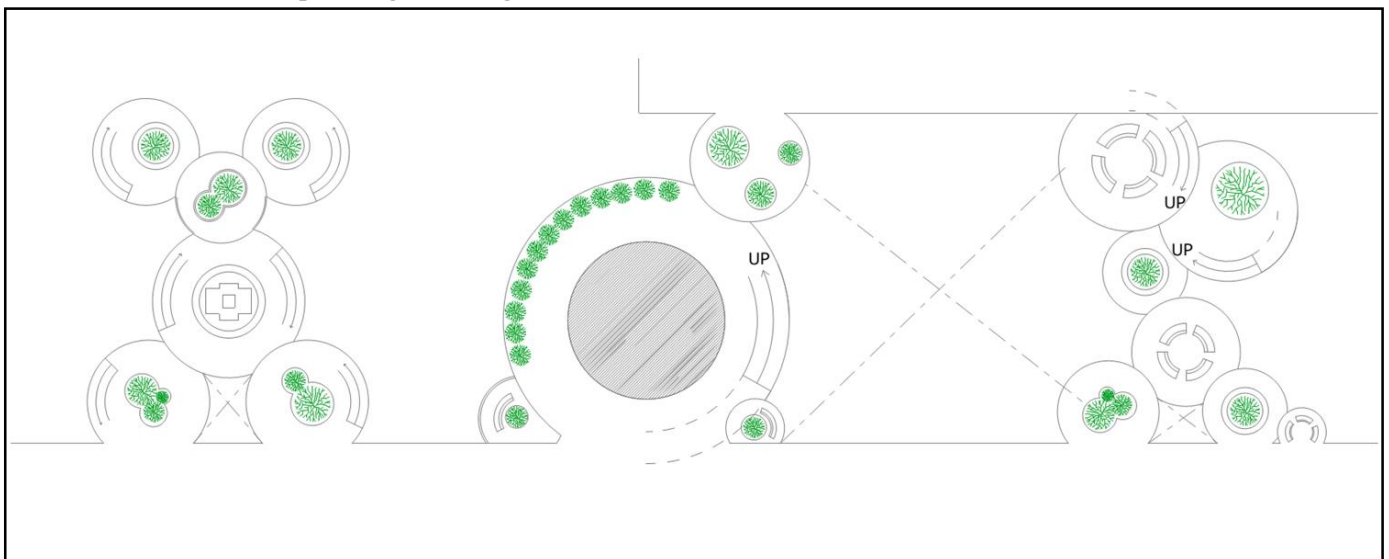
Our team’s concept is “green station”. We designed Utsunomiya station with lots of green. We decided to build the station in a brighter color, so people can feel comfortable and closer to nature. Besides a green station, we also designed the LRT station on the first floor. This is a unique point.



Car parking building



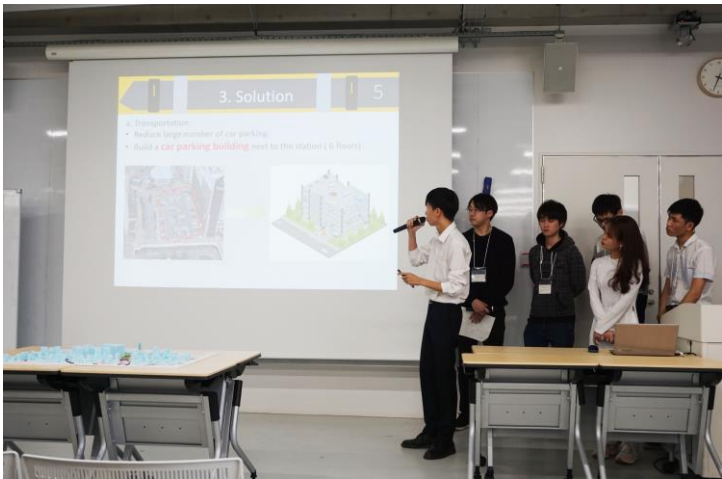
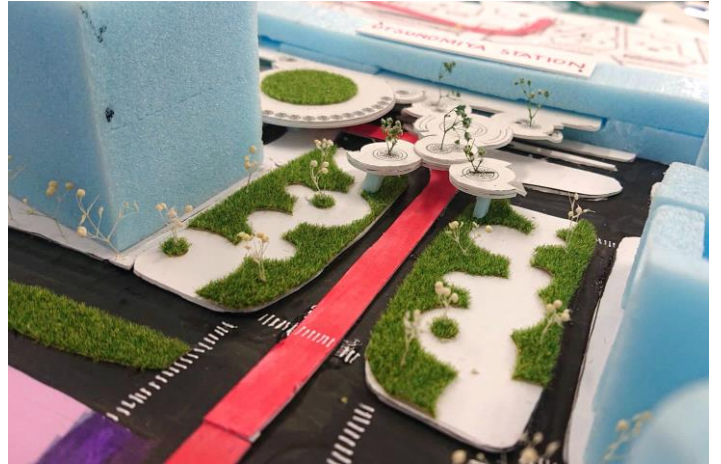
Main view



3 Workshops between DUT and UU

3-5 The 3rd Joint Workshop between DUT and UU

3-5-9 Output of Team 4



3 Workshops between DUT and UU

3-5 The 3rd Joint Workshop between DUT and UU

3-5-10 Output of Team 5



Title:

“Urban connection”

Concept:

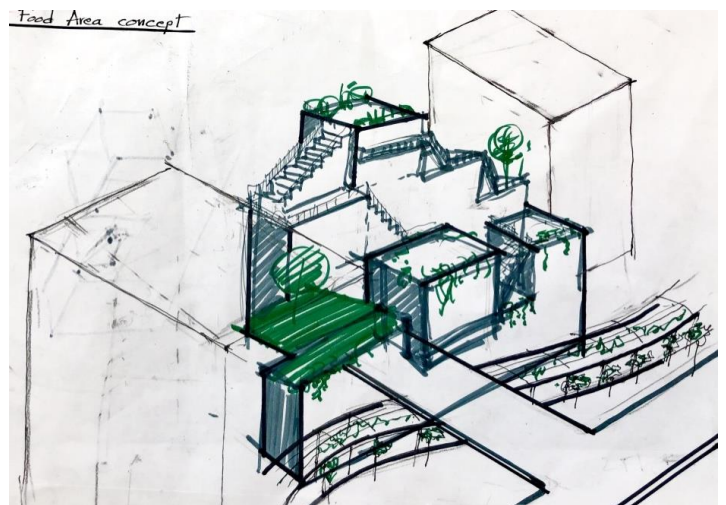
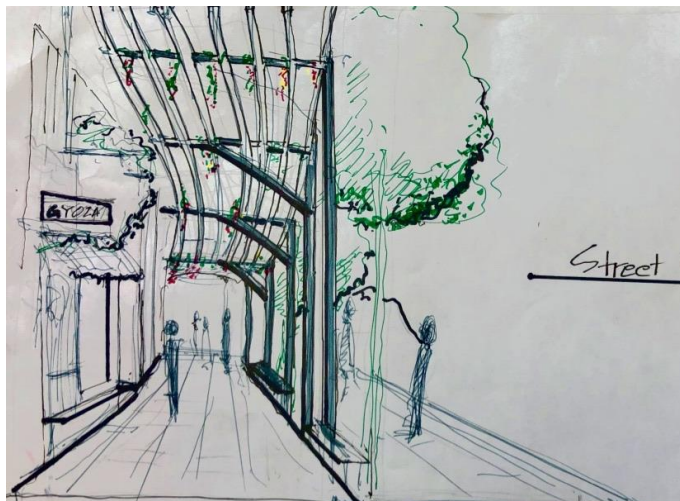
1. Conduction of people and traffic
2. Efficient land use
3. Connection to city central
4. Local element



LRT station



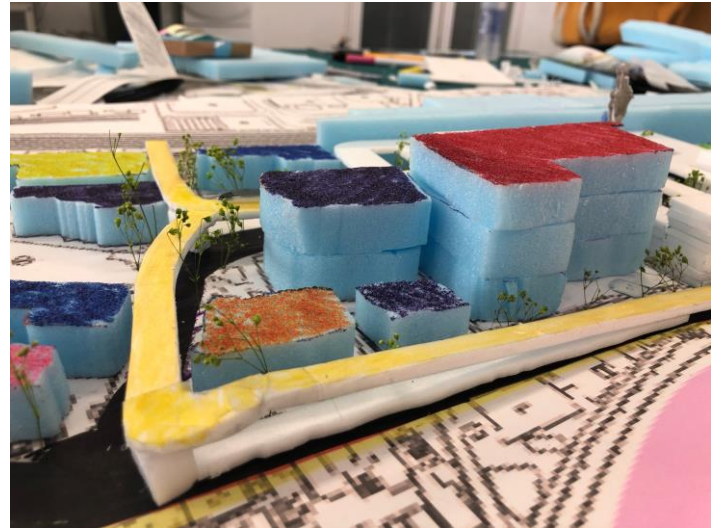
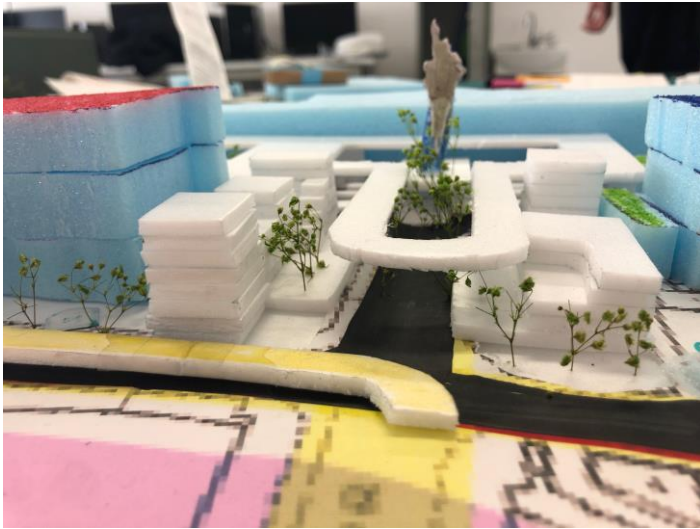
Main view



3 Workshops between DUT and UU

3-5 The 3rd Joint Workshop between DUT and UU

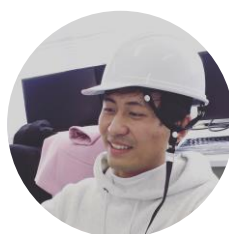
3-5-10 Output of Team 5



3 Workshops between DUT and UU

3-5 The 3rd Joint Workshop between DUT and UU

3-5-11 Special Team



Topic: 3 years of exchange activities between UU and DUT



3 Workshops between DUT and UU

3-5 The 3rd Joint Workshop between DUT and UU

3-5-12 Award and Closing Ceremony



Exchange and cooperation between DUT and UU



Welcome speech (Prof. Tsukamoto)



Certificate of participation



Award of best design (Team 5)



Presentation by a team from a Tochigi company in Danang City

3 Workshops between DUT and UU

3-6 Faculty Members: Utsunomiya University



Dr. Nobuaki Ohmori

Professor, Department of Civil Engineering and Regional Design, Faculty of Regional Design;
Research field: Urban Transportation Planning



Dr. Akio Yasumori

Associate Professor, Department of Architecture and Urban Design, Faculty of Regional Design;
Research field: Architectural Design



Dr. Minh Hai Nguyen

Assistant Professor, Department of Civil Engineering and Regional Design, Faculty of Regional Design;
Research field: Structural engineering



Dr. Teppei Osada

Assistant Professor, Department of Civil Engineering and Regional Design, Faculty of Regional Design;
Research field: Traffic engineering



Dr. Kisa Fujiwara

Assistant Professor, Department of Civil Engineering and Regional Design, Faculty of Regional Design;
Research field: Architecture environment



Dr. Lingling Wang

Assistant Professor, Department of Civil Engineering and Regional Design, Faculty of Regional Design;
Research field: Project management



Mr. Yoshito Dobashi

Research Associate, Doctoral student (acquired Ph.D. in March 2020), Graduate School of Engineering;
Research field: Barrier-free in transportation, disability and development

3 Workshops between DUT and UU

3-6 Faculty Members: Danang University of Science and Technology



Dr. Nguyen Anh Tuan
Associate Professor, Head of
Faculty of Architecture;
Research field: Architectural
environment



Dr. Huynh Phuong Nam
Lecturer, Head of Faculty of
Road and Bridge
Engineering; Research field:
Materials in construction



Dr. Do Viet Hai
Lecturer, Faculty of Road and
Bridge Engineering;
Research field: Structural
engineering



Dr. Nguyen Hong Ngoc
Lecturer, Faculty of
Architecture;
Research field: Urban
planning



Mr. Tran Van Tam
Lecturer, Faculty of
Architecture;
Research field: Art in
architecture



Mr. Nguyen Xuan Trung
Lecturer, Faculty of
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Research field: Architecture
design, urban planning



Ms. Tran Thi Phuong Anh
Lecturer, Faculty of Road and
Bridge Engineering;
Research field: Urban
planning



Dr. Nguyen Le Phong
Lecturer, Faculty of
Architecture;
Research field: Architecture
design, urban planning



Mr. Do Anh Vu
Lecturer, Faculty of Road and
Bridge Engineering;
Research field: Structural
engineering



Ms. Truong Nguyen Song Ha
Research Associate, Doctoral
Student, Faculty of Architecture

3 Workshops between DUT and UU

3-7 Students: Utsunomiya University

Students of Department of Civil Engineering and Regional Design

The 1st Joint Workshop between DUT and UU The 3rd Joint Workshop between DUT and UU

Mr. Yoshito Dobashi
Mr. Takeru Sugeno
Mr. Kodai Watanabe
Mr. Hikaru Saito
Mr. Kohei Kasai
Ms. Natsumi Sato

Mr. Yuqi Han
Ms. Oyun-Erdene Shirendev
Mr. Kyohei Ogawa
Mr. Naoki Hattori
Mr. Hikaru Fujioka
Mr. Syotaro Baba
Ms. Junlin Li

The 2nd Joint Workshop between DUT and UU

Mr. Yuqi Han
Ms. Oyun-Erdene Shirendev
Mr. Tomoyo Wagatsuma
Mr. Kyohei Ogawa
Mr. Soto Suzuki

Mr. Kentaro Takahashi
Mr. Jin Qiang
Mr. Daisuke Yaginuma
Mr. Keiya Yamaguchi

Students of Department of Architecture and Urban Design

The 1st Joint Workshop between DUT and UU The 3rd Joint Workshop between DUT and UU

Mr. Kiichiro Usami
Mr. Takahiro Maruyama

Ms. Yukie Calero
Mr. Tomoki Yamaguchi
Mr. Kazuki Watanabe

The 2nd Joint Workshop between DUT and UU

Mr. Ryosuke Tomioka
Mr. Katsuya Sato
Ms. Yukie Calero

Mr. Motoki Terasawa
Mr. Akiyo Hattori
Mr. Shuta Hayamizu
Mr. Raku Hayasaka
Mr. Aisikare Maimaitiming

Students of Department of Community Design

The 3rd Joint Workshop between DUT and UU

Mr. Lingxiao Zhu

3 Workshops between DUT and UU

3-7 Students: Danang University of Science and Technology

The 1st Joint Workshop between DUT and UU

Ms. Tran Phuoc Bao Thu
Ms. Pham Nguyen Hong Ngoc
Ms. Thai Hien
Mr. Phan Ngoc Tien
Ms. Nguyen Kim Ngan
Mr. Nguyen Truong Giang
Mr. Phung Huu Hoang Thao
Ms. Le Thi Hong Diep
Mr. Nguyen Gia Bao
Mr. Pham Lap
Mr. Nguyen Dang Huy
Mr. Nguyen Tan
Ms. Tran Le Anh Huy
Mr. Hoang Minh Quang
Mr. Tran Van Sy

The 3rd Joint Workshop between DUT and UU

Mr. Pham Tien Cuong
Mr. Hoang Viet An
Mr. Tran Quang Vy
Mr. Nguyen Hoang An
Mr. Pham Sy Han
Mr. Nguyen Tan
Mr. Thieu Quang Sang
Ms. Ho Thi My Hang
Mr. Nguyen Truong Giang
Ms. Tran Thi Minh Chau
Ms. Ton Nu Y Nhi
Mr. Nguyen Van Uy
Ms. Nguyen Kim Ngan
Mr. Le Nguyen Hoang

The 2nd Joint Workshop between DUT and UU

Ms. Tran Phuoc Bao Thu	Mr. Nguyen Van Tu Huy
Ms. Pham Nguyen Hong Ngoc	Mr. Le Nguyen Ba Phuc
Ms. Nguyen Kim Ngan	Mr. Pham Minh Sang
Mr. Nguyen Truong Giang	Mr. Vo Dinh Quang Nhat
Mr. Phung Huu Hoang Thao	Mr. Le Thanh Quang
Mr. Truong Van Khoa	Mr. Quach Ba Lam
Ms. Ton Nu Y Nhi	Mr. Pham Nguyen Khoa
Ms. Tran Thi Minh Chau	Mr. Le Nguyen Nhat Huy
Mr. Nguyen Quoc Loc	Mr. Tran Cong Duc
Mr. Tran Nhat Tien	Ms. Tran Vo Ngoc Ha
Mr. Ha Huy	Ms. Nguyen Thi Thanh Nhan
Mr. Nguyen Tan	Ms. Tran Le Anh Huy
Mr. Tran Minh Sang	Mr. Nguyen Tho Phu
Ms. Nguyen Thi My Duyen	Mr. Nguyen Thanh
Mr. Nguyen Van Dinh	Mr. Nguyen Van Hiep
Mr. Hoang Truong Chien	
Ms. Le Thi Thao Suong	
Ms. Bui Thi Thuy Trang	
Ms. Vo Thi Nhu Y	
Mr. Truong Tuan Anh	
Mr. Nguyen Van Khoa	
Ms. Nguyen Thi My Duyen	
Mr. Ngo Viet Quoc Hung	

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