

SUMMER COURSE FOR INTERNATIONAL STUDENTS

URBAN TRANSITION: SMART CITY, SENSOR AND BEYOND

2021.9.15, 09:00-17:45 [JST/GMT+9]

■ OUTLINE |

Metastasizing cities in the midst of crisis. The Irish Potato Famine, once called the "Great Famine," triggered a major urban transition that divided the ages. After the Great East Japan Earthquake and COVID-19, how are Japanese cities going to change now? In our summer course, planners, engineers and researchers will give lectures on advanced practices of cities around Japan for social implementation of sensing technology and urban transition. The lectures will consist of fundamentals and applications. We will learn about advanced sensing technologies for urban flows, from image processing and laser radar to autonomous driving. We will also hear an overview of smart cities in progress in an attractive group of cities in Japan, and learn about advanced urban management practices in various regions. We have prepared tutorials by experts in the field and keynote lectures by leading experts, as well as practical attempts at urban transition, such as the autonomous driving project and the Busta project. This is an opportunity to learn more about Japanese smart cities. We hope you will join us.

Eiji Hato, Professor / Course Director, the University of Tokyo

■ **Organizer** | Next Generation Urban-Transport Studies Unit, the University of Tokyo
International Institute for Next Urban Planning, Design and Management, the University of Tokyo
Association for Planning and Transportation Studies
National Graduate Institute for Policy Studies

COURSE WITH CERTIFICATE VIA ZOOM [FOR INTERNATIONAL STUDENTS]

■ **Participants** | International students studying in Japan [or thinking of studying in Japan]

■ **Capacity** | About 30 Students [*a few slots for Japanese students]

If there are too many applications, we may ask some applicants to watch the lecture in "course via youtube".

Participants in "Course with Certificate" will be confirmed and notified within one week after the deadline.

■ **Certification Requirements** | Participants are required to submit a short report [3 ppt slides or video] on smart cities based on the lecture materials by September 8. Details will be provided to applicants. Participants are also requested to make a presentation at the discussion session or ask questions in the lectures.

■ **Application Form** | <https://forms.gle/SGpLhGx5yZJKsART8> ■ **Deadline** | 2021.8.13

COURSE VIA YOUTUBE [FOR ALL PARTICIPANTS]

■ **Participants** | For all participants [only some lectures will be available / No certificate]

■ **Application form** | <https://forms.gle/H4EigndhLRSMgASy8> ■ **Deadline** | 2021.9.13

■ **Participants Fee** | Free of charge ■ **Contact Form** | <https://forms.gle/Pbr4vyRHsFQcw8wV7>

APPLICATION FORM

Course with
Certificate
via Zoom



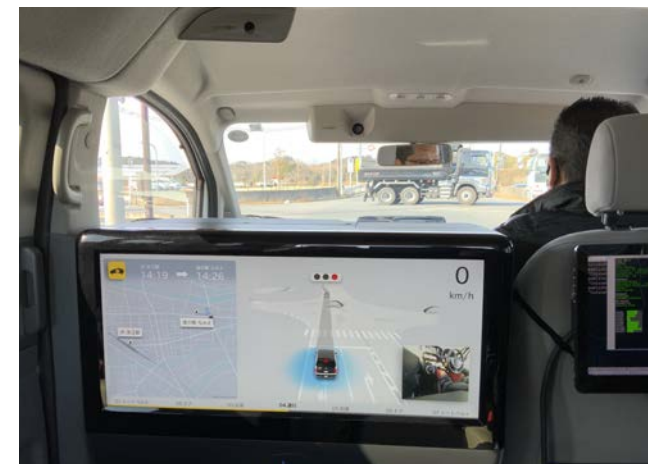
Course
via Youtube



LANGUAGE

English

*Japanese-English
simultaneous
interpretation will be
provided.



Regional experiment on autonomous driving for reconstruction of Namie, Fukushima (Nissan Motor)



Digital Twin in Toyosu Smart City (Shimizu Corporation)

INFORMATION The following summer school will be offered.

Summer School of Behavior in Networks Modelling

-Next generation of behavioral modeling with machine learning

Date : 17-19 September 2021

URL : http://bin.t.u-tokyo.ac.jp/model21/index_e.html

PROGRAM

*Some programs are not available on youtube.

15 SEPTEMBER 2021, 09:00-17:45[JST]

INTRODUCTION AND OPENING REMARKS

09:00-09:15

Eiji HATO Course Director / Professor, the University of Tokyo

Hiroshi WATANABE

Deputy Director-General for Engineering Affairs, City Bureau,
Ministry of Land, Infrastructure, Transport and Tourism (MLIT)

KEYNOTE RESEARCH TALK 09:15-10:30

Urban Sensing Technology and its Application

Takashi FUSE Professor, the University of Tokyo

Dublin during the Irish Potato Famine: Coping with a Crisis

Shunsuke KATSUTA Professor, the University of Tokyo

LEADING EDGE OF SENSING TECHNOLOGY

10:45-12:00

by Daisuke FUKUDA | the University of Tokyo

Introduction of

IHI LiDAR system for ITS

Hikaru ISHIKAWA IHI Corporation

FaceWatch Technologies

for Urban Flow Monitoring

Akihiko ICHIKAWA Senior
Manager, Cross-Industry Business Development
Division, NEC

Fukushima Recovery Planning

with Automatic Driving

Nobuyuki KUGE

Manager, Nissan Research Center, Nissan Motor Co., Ltd.



Recognition of pedestrian flow for spatial design

DEVELOPMENT OF SMART CITIES

13:00-15:00

by Yusuke HARA | Tohoku University

Smart Cities in Japan

Kazunori OSHIMA

Deputy Director, City Planning Survey and Information Office, City Bureau, MLIT

Kashiwanoha Smart City and New Generation Design

Yusuke SASAKI

Project Leader, Planning Group, Kashiwanoha Urban Planning and Development Department,
Mitsui Fudosan Co., Ltd.

Tokyo Marunouchi / Area Management

Model Approach for The Smart City

Kazutaka KURODA Mitsubishi Estate CO., LTD.

/Acting Chairman, The Council for Area Development
and Management of Otemachi, Marunouchi, and Yurakucho

From Link to Node: New Mobility and Busta

Change the Regional Transport Networks

Yohei HARADA Planning Division, Road Bureau, MLIT

JR East's Open Innovation and its Application

Hiroshi IRIE Technology Innovation Headquarters, East Japan Railway Company



Smart City Exhibition and Autonomous Vehicle
Service "Uminote-Line" experiments

PRESENTATION AND DISCUSSION BY STUDENTS

15:15-15:55

KEYNOTE LECTURE

16:00-17:30

Cities and Information

Yasushi ASAMI Vice-president / Professor, the University of Tokyo

Digital Twin and i-Construction

Masahiro INDO Executive officer, Shimizu Corporation

CERTIFICATE PRESENTATION 17:30-17:45

Kazumasa OZAWA Director general / Professor, the University of Tokyo