

**Transportation and Urban Design Studio (E)  
for Graduate School of Civil Engineering in 2018 Autumn Semester (A1)**

**Lecturers:** Prof. Eiji Hato\*, Prof. Takamasa Iryo\*, Prof. Ryuichi Shibasaki\*\*, Dr. Junji Urata\*\*\*

\* Professor, Transport Research and Infrastructure Planning (TRIP) Lab.

\*\* Associate Professor, Department of Systems Innovation, School of Engineering,

\*\*\* Assistant Professor, Transport Research and Infrastructure Planning (TRIP) Lab.

**Teaching Assistants:** Wadiya Rallage Samal Sanjeeva Dharmarathna (Posdoc researcher, TRIP Lab)

**2. Place and Time:**

in Lecture Room No.13 of Engineering Bldg. No.1, on Monday and Thursdays 13:00-14:45

**3. Purpose and Contents of the Course:**

This course focuses on learning some of methodologies to analyze transportations and regions, which are sometimes vulnerable to natural hazards. In addition to it, getting used to the essence of the basic way of theoretical and mathematical thinking in planning is another main target. For fulfilling these purposes, we choose three topics: 1) Traffic flow modelling, 2) Logistics management and analysis, 3) Travel behavior modelling and statistics.

**4. Schedule of the Course:**

Topic 1: Traffic Flow Theory and Modelling, by Prof. Iryo and Prof. Hato

01) Sep. 27 Introduction

02) \*Oct. 2 (8:30-10:15) Traffic Flow Theory and Modelling (1) \*: Day & Time are changed

03) \*Oct. 4 (16:50-18:35) Traffic Flow Theory and Modelling (2) \*: Time is changed

04) \*Oct. 9 (8:30-10:15) Traffic Flow Theory and Modelling (3) \*: Day & Time are changed

05) Oct. 15 Final Exercise for Topic 1

Topic 2: Logistics Management and Analysis, by Prof. Shibasaki and Prof. Hato

06) Oct. 18 Logistics Operation and Advanced Methodologies (1)

07) Oct. 22 Logistics Operation and Advanced Methodologies (2)

08) Oct. 25 Logistics Operation and Advanced Methodologies (3)

10) Nov. 1 Final Presentation for Topic 2

Topic 3: Transportation Modelling and Statistics, by Dr. Urata, Dr. Samal and Prof. Hato

09) Oct. 29 Transportation Modelling: Discrete Choice Modelling with “R” (1)

11) Nov. 5 Transportation Modelling: Advanced Discrete Choice Modelling (2)

12) Nov. 8 Transportation Modelling: Machine learning with “R” (3)

13) Nov. 12 Final Presentation for Topic 3

**5. Evaluation of the Achievement**

Assignments in each of the three topics (30 points @ 3), and attendance points for classes (10 points)

Lecture website: <http://bin.t.u-tokyo.ac.jp/tuds2018/>

If you have a question. Please ask Dr. Samal(samal{at}trip.t.u-tokyo.ac.jp) or Dr. Urata (urata{at}bin.t.u-tokyo.ac.jp)