

The Short Intensive Course Program between UTokyo and SNU

学部1単位/Faculty1 Credit ※4年生対象/for B4 FEN-CO5972L3 国際連携工学特別講義VIII International Collaborators' Lecture on Engineering VIII

大学院1単位/Graduate School1 Credit

3799-389 国際連携特別講義XVI

International Collaborators' Special Lecture on Engineering XVI

#### Lecturer Associate Professor Yong Sung Park

Department of Civil and Environment Engineering, College of Engineering, Seoul National University (SNU)



# Water Surface Waves

# Wednesday, January 22~Friday, January 24, 2025 (3 days)

Attention: Students who have received credit for the following courses offered in 2021 do not receive credit for this course. Auditing is permitted.

国際連携工学特別講義 VII/International Collaborators' Lecture on Engineering VII(FEN-CO5971L3) 国際連携特別講義 XV/International Collaborators' Special Lecture on Engineering XV(3799-388)

#### **Course objectives**

To introduce linear and nonlinear wave theories based on firmly established mathematics and to apply to engineering problems.

#### Lecture time

January 22~23 ···· 9:30 • 11:30, 13:30 • 15:30 January 24 ···· 9:30 • 12:00

#### Lecture way

January 22~23 ···· Eng. Bldg. No.1 Seminar Room B January 24 ···· Eng. Bldg. No.1 #13

#### Language

English

#### Counterpart at UTokyo

#### Lecture plan

#### Day 1:

- AM L01 Review of Fluid dynamics
  - L02 Linear wave theory
- PM L03 Dispersion relation
  - L04 Engineering properties

#### Day 2:

- AM L05 Mid-term exam
  - L06 Introduction to perturbation methods
- PM L07 Stokes wave theory
  - L08 Nonlinear shallow-water equations

Professor Takenori Shimozono Department of Civil Engineering, School of Engineering

Day 3:

AM - L09 Boussiensq and KdV theories \*Graded by a take-home exam

## 工学系研究科国際工学教育推進機構

Institute for Innovation in International Engineering Education, School of Engineering Contact: H. Sugiura

email: ut-snu@cce.t.u-tokyo.ac.jp

### **Registration** is now open!

Please use the QR code to register.

