Netherlands Summer School Class Schedule (as of April 7, 2024)

[2023年度のダイジェスト動画はこちら]

Please note that this schedule is subject to change without prior notice.

Saturday, August 10th: Arrival Day in Delft
Sunday, August 11th: Orientation
Week 1 Introduction

1. Welcome session
2. Introduction Offshore Wind
3. Company Visits Ørsted and Westermeerwind Wind Farm
4. Offshore Support Structures
5. Projects and Case Studies(Lab)
  a. Rotor Competition
  b. Energy Yield Calculation
  c. Power Generation
  d. Simplified Design of Monopile Support Structure
  e. Site Investigation
  f. Data Processing
  g. Wind Turbine Selection
  h. Wind Farm Layout

Week 2

1. Offshore Wind Farm Design Part 1
  a. Offshore Wind Farm Case Study
  b. Data Collection
  c. Data Processing
  d. Site Selection
  e. Soil
  f. Wind to Power
  g. Key Considerations Wind Turbine Selection
  h. Wind Farm Layout
  i. Guest Lecuture
2. Kinderdijk Visit
3. Floating Structures for Renewable Energy
4. Projects and Case Studies(Lab)
  a. Tender Game
  b. In the Mud
  c. Wake Effect

d. Simplified Design of Monopile Support Structure
e. Monopile Dynamics
f. Load Calculations and Design Checks
g. Fatigue Calculations
h. Offshore Power Network Design
i. Logistics and Installation Plan

Week 3

1. Offshore Wind Farm Design Part2
    a. Wind Turbine Dynamics
    b. Load Calculations
    c. Fatigue
    d. Installing Logistics
    e. Offshore Power Networks
    f. Guest Lecuture
2. Beach Game
3. Ocean Energy

Week 4 Subsea Engineering & Autonomous Vessels

1. Offshore Wind Farm Design
    a. The Handover
    b. The Need for O&M
    c. Cost versus Income
    d. Guest Lecture: Ports (Port of Rotterdam)
    e. Generation of Hydrogen
    f. Guest Lecture: Impact of Hydrogen as Source of Energy (DUT)
    g. Storage and Transport of Hydrogen
    h. Guest Lecuture
2. Port of Rotterdam visit
3. Cases and Projects
    a. Operation and Maintenance
    b. LCOE Calculations
    c. Wind Farm Operator
    d. The Race for Hydrogen
    e. Installation and Commissioning Plan
    f. Operation & Maintenance Plan
    g. LCoE Calculation
4. Final Project Presentation

Saturday, September 7th: Hotel Check-out