COURSE DETAIL

DATA SCIENCE

Country
Japan

Host Institution
Tohoku University

Program(s)
Engineering and Science

UCEAP Course Level
Graduate

UCEAP Subject Area(s)
Computer Science

UCEAP Course Number
200

UCEAP Course Suffix

UCEAP Official Title
DATA SCIENCE

UCEAP Transcript Title
DATA SCIENCE

UCEAP Quarter Units
3.00

UCEAP Semester Units
2.00

Course Description

This data science course introduces essential techniques and tools used in Data Science. Each week the course covers a unique topic, starting from the very basics of the Data Science pipeline to advanced topics like Neural Networks and Time-Series Analysis, all explained using a sophisticated slides and easy-to-understand Python codes.

For this semester, the course will use a single comprehensive dataset that could cover all of the topics, to make it easier for students to understand the concepts of data science, without spending too much time understanding the dataset.

By the end of this course, students are expected to:

1. Understand the Data Science Pipeline.
2. Apply various machine learning techniques.
3. Evaluate model performance and fine-tune hyperparameters.
4. Understand and apply Neural Networks, Text Mining, and Time-Series Analysis.
5. Translate theory into practice using Python.

Language(s) of Instruction
English

Host Institution Course Number
N/A

Host Institution Course Title
MACHINE LEARNING BASICS

Host Institution Course Details

Host Institution Campus
Tohoku University

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed
2023-2024