COURSE DETAIL

BASIC MATHEMATICS AND PROGRAMMING PRACTICE FOR MACHINE LEARNING

Country

Korea, South

Host Institution

Seoul National University

Program(s)

Seoul National University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Computer Science

UCEAP Course Number

107

UCEAP Course Suffix

UCEAP Official Title

BASIC MATHEMATICS AND PROGRAMMING PRACTICE FOR MACHINE LEARNING

UCEAP Transcript Title

MATH & MACHINE LRNG

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course provides an opportunity to learn through practice of combined fundamental mathematics and programming to understand machine learning. The course operates as micro-learning that allows students to learn the necessary unit concept of mathematics and learn through programming exercises immediately. This course covers the essential requirements for machine learning such as algebra, calculus, linear algebra, and geometry. The programming language used in this course is Python. This course is mainly targeted for undergraduate students with advanced high-school level mathematics but with no background in programming. Some basic machine learning algorithms will be introduced to show the application of mathematics in practice. Finally, some advanced learning algorithms and important topics will be reviewed.

Language(s) of Instruction

English

Host Institution Course Number

M2177.005800

Host Institution Course Title

BASIC MATHEMATICS AND PROGRAMMING PRACTICE FOR MACHINE LEARNING

Host Institution Course Details

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed

2024-2025

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