

COURSE DETAIL

NATURAL LANGUAGE PROCESSING

Country

Hong Kong

Host Institution

University of Hong Kong

Program(s)

University of Hong Kong

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Statistics

UCEAP Course Number

112

UCEAP Course Suffix**UCEAP Official Title**

NATURAL LANGUAGE PROCESSING

UCEAP Transcript Title

NAT LANG PROCESSING

UCEAP Quarter Units

5.00

UCEAP Semester Units

3.30

Course Description

This course introduces the mathematical, statistical, and computational challenges in natural language processing. It covers the main applications of NLP techniques and a range of models in structured prediction and deep learning. Students gain a thorough introduction to cutting-edge machine learning and deep learning techniques for NLP. This course covers a broad range of topics including text classification, sentiment analysis, neural network, word embedding, sequence models, language models, machine translation, topic detection, and ChatGPT. The underlying techniques from probability, statistics, machine learning, transformer and deep learning are also introduced. Prerequisites: Pass in STAT2602 and COMP2119 or same level. Proficiency in Python.

Language(s) of Instruction

English

Host Institution Course Number

STAT4011,SDST4011

Host Institution Course Title

NATURAL LANGUAGE PROCESSING

Host Institution Course Details

<https://saasweb.hku.hk/courses/202526/sdst4011.html>

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Statistics and Actuarial Science

Course Last Reviewed

2025-2026

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