

# COURSE DETAIL

## LARGE LANGUAGE MODEL

**Country**

Korea, South

**Host Institution**

Yonsei University

**Program(s)**

Yonsei University

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Computer Science

**UCEAP Course Number**

129

**UCEAP Course Suffix****UCEAP Official Title**

LARGE LANGUAGE MODEL

**UCEAP Transcript Title**

LARGE LANG MODEL

**UCEAP Quarter Units**

4.50

**UCEAP Semester Units**

3.00

## Course Description

This course provides a comprehensive perspective on large language models. Specifically, in the first half, it covers the fundamentals of language models, including network structures, training, inference, and evaluation. In the second half, the course focuses on the interpretation of large language models, alignment, and their applications beyond simple text generation. Through this approach, the course equips students with foundational knowledge of the technologies behind large language models, helping them smoothly engage in research or practical applications in this field. Topics include Introduction and basics of large language models, Preprocessing: tokenization and data curation, Pre-training of large language models, Scaling laws and emergent behavior, Alignment: instruction tuning and preference learning, Learning from AI feedback, Decoding algorithms, Reasoning with test-time inference methods, Retrieval-augmented generation, AI agents, and Extension to multi-modality.

Prerequisites: Machine learning, Deep learning

### Language(s) of Instruction

English

### Host Institution Course Number

CAS4133

### Host Institution Course Title

LARGE LANGUAGE MODEL

### 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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