

COURSE DETAIL

REINFORCEMENT LEARNING

Country

Korea, South

Host Institution

Yonsei University

Program(s)

Yonsei University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Statistics

UCEAP Course Number

112

UCEAP Course Suffix**UCEAP Official Title**

REINFORCEMENT LEARNING

UCEAP Transcript Title

REINFORCEMENT LEARN

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course develops a solid understanding of reinforcement learning, a major area within machine learning and artificial intelligence. Reinforcement learning is grounded in various probabilistic and statistical theories and has recently been widely applied to the training of large-scale machine learning models. The course covers the theoretical foundations, applications, and current research trends in this field. Topics include Finite Markov Decision Processes, Dynamic Programming, Temporal Difference Learning, Eligibility Traces, Generalization and Function Approximation, On-policy Approximation of Action Values, Off-policy Approximation of Action Values and Policy Approximation, Meta/Multi-task Learning and RL, and Foundation Model and RL.

Language(s) of Instruction

English

Host Institution Course Number

STA3145

Host Institution Course Title

REINFORCEMENT LEARNING

Host Institution Course Details

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed

2025-2026

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