

COURSE DETAIL

SIMULATION

Country

Korea, South

Host Institution

Yonsei University

Program(s)

Yonsei University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Engineering

UCEAP Course Number

104

UCEAP Course Suffix**UCEAP Official Title**

SIMULATION

UCEAP Transcript Title

SIMULATION

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

The objective of this course is for students to learn to appropriately apply discrete event simulation modeling for decision support in Industrial Engineering problems through developing skills in model building, simulation output analysis, and communication of technical information and conclusions drawn from data analysis. Topics include Introduction to Discrete, Event System Simulation, Simulating a Queueing System, General Principles, Discrete Distributions & Continuous Distributions, Poisson Process and Characteristics of Queueing Systems, Long-Run Measures of Performance of Queueing Systems, Steady-State Behavior, Networks of Queues, Techniques for Generating Random Numbers, Tests for Random Numbers: Tests for Autocorrelation, Inverse-Transform & Acceptance-Rejection Techniques, Parameter Estimation, Data Collection & Identifying the Distribution with Data, Multivariate and Time-Series Input Models, and Stochastic Nature of Output Data.

Language(s) of Instruction

English

Host Institution Course Number

IIE3110

Host Institution Course Title

SIMULATION

Host Institution Course Details

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed

2025-2026

[Print](#)