



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Stochastic Modeling and Simulation

ISE 4100

Credit Hours:

4.00 - 4.00

Course Components:

Lecture

Lab

Course Description:

Methods for stochastic process and discrete event simulation modeling and system design and decision-making using simulation tools.

Prerequisites and Co-requisites:

Prereq: 2400 and Stat 3470, and enrollment in Industrial & Systems Engineering major; or permission of instructor.

Course Goals / Objectives:

- Plan and execute defensible data collection and analysis for discrete event simulation modeling
- Apply discrete event simulation software and explain what it is doing
- Generate ideas for system redesign and evaluate them defensibly using simulation
- Apply ARENA software to provide insights for a real world problem and explain the benefits of ARENA compared with alternative software
- Apply software to analyze inputs to and outputs from simulation models