

100-2 大葉大學 選課版課綱

基本資訊

課程名稱	系統模擬	科目序號 / 代號	2441 / IEI4042
開課系所	工業工程與科技管理學系	學制 / 班級	大學日間部4年1班
任課教師	陳偉星	專兼任別	專任
必選修 / 學分數	選修 / 3	畢業班 / 非畢業班	畢業班
上課時段 / 地點	(四)567 / H729	授課語言別	中文

課程簡介

In this course simulation modeling and analysis will be introduced. Upon successful completion of this course, you are expected to be able to design and analyze simulation experiments with the aim of developing solutions to manufacturing and service system problems. In specific, you will

- ? learn the concepts of simulation,
- ? review/learn statistical distributions,
- ? conduct system simulation using ARENA software for coding your models, and
- ? interpret simulation outputs, output analysis techniques using Arena ' s tools.

課程大綱

Chapter 1: What is Simulation? (1 week)

Chapter 2: Fundamental Simulation Concepts (3 weeks)Appendix C: Probability Basics, Random Variables, Sampling and Sampling Distributions, Point Estimation and Confidence Intervals,Appendix D: Exponential and Triangular Distributions, p. 506, p. 512Sections 12.1?12.2: Random-Number Generation, Generating Random Variates,

Chapter 3: A Guided Tour to Arena (2 weeks)

Chapter 4: Modeling Basic Operations and Inputs (3 weeks)Midterm Examination

Proposal Submission Deadline: Apr 24, 2007.

Chapter 5: Modeling Detailed Operations (4 weeks)

Chapter 6: Terminating Statistical Analysis (2 weeks)Last two weeks will be reserved for the project presentations

基本能力或先修課程

Probability Basics, Random Variables, Sampling and Sampling Distributions,