

## Course Content

Course Title (English)	Computer Simulation
Course Title (Chinese)	計算機模擬
Credit	3
Instructor	Prof. Zse-Hong Tsai 蔡志宏 教授
Outline	<ol style="list-style-type: none"><li>1. Basic Simulation Modeling</li><li>2 Modeling Complex Systems</li><li>3 Review of Basic Probability and Statistics</li><li>4 Building Valid, Credible, and Appropriately Detailed Simulation Models</li><li>5 Selecting Input Probability Distributions</li><li>6 Random-Number Generators</li><li>7 Generating Random Variates</li><li>8 Output Data Analysis for a Single System</li><li>9 Comparing Alternative System Configurations</li><li>10 Variance-Reduction Techniques</li><li>11 Case Studies in Manufacturing Systems &amp; Telecommunication Networks</li></ol>
Goal	To develop basic capabilities in modeling, simulation programming, and simulation-based problem-solving approaches.
English Teaching	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Teaching Material	<input checked="" type="checkbox"/> English <input type="checkbox"/> Chinese