

Accelerate your success with ExtendSim by learning proven modeling techniques directly from experienced simulation professionals. Whether you're new to simulation or looking to become more productive with ExtendSim, this hands-on course provides the practical skills and confidence needed to build, analyze, and communicate simulation results.

From your first session, you'll create and run models while learning industry best practices for simulation design, model validation, data management, debugging, experimentation, and results analysis. Through guided exercises and realistic case studies, you'll see how ExtendSim can be applied to solve complex operational and business challenges.



There are nine sessions, each lasting 1.5 to 2 hours, spread over 2+ weeks. Sessions begin at 3pm EDT/9pm CET Monday through Thursday, with the final session on the third Monday being dedicated to reviewing key concepts and addressing any remaining questions.

Homework exercises and real-world case studies reinforce each topic, helping you apply concepts immediately and build lasting modeling skills. Students should plan to spend 1 to 2 hours daily on homework to fully grasp the material.

week 1 agenda

Session 1: Monday

- Introduction to the Course, Simulation, and ExtendSim

Homework

- *Case Study: ACME Electronics (suggested completion day: week 1, session 4)*

Session 2: Tuesday

- Chapter 1: Modeling Basics

Session 3: Wednesday

- Chapter 2: Item Properties

Session 4: Thursday

- ACME Electronics Review
- Chapter 3: Routing
- Chapter 4: Gating

Homework

- *Case Study: Family Medical Clinic (suggested completion day: week 2, session 5)*

week 2 agenda

Session 5: Monday

- Family Medical Clinic Review
- Chapter 5: Batching

Homework

- *Case Study: Ice Cream Shop (suggested completion day: week 2, session 8)*

week 2 agenda -- continued

Session 6: Tuesday

- Chapter 6: Resources
- Chapter 7: Shifts

Session 7: Wednesday

- Chapter 8: ExtendSim Database

Session 8: Thursday

- Ice Cream Shop Review
- Chapter 9: Hierarchical Blocks & Presentation

Homework

- *Case Study: The Quick Stop* (suggested completion day: week 3, session 9)

week 3 agenda

Session 9: Monday

- Quick Stop Review
- Simulation Project Review

Homework

- *Case Study: Happy Healthcare*

Optional One-on-One Post-Course Session

- Case Study Follow-Up

prerequisites and prepping for the course

Basic Windows computer skills and a knowledge of basic statistics (random distributions and confidence intervals) is recommended.

Before your first day of class, it will be extremely helpful if you familiarize yourself with ExtendSim. If you have not already done so, please go through the Tutorials in the *Discrete Event Quick Start Guide* or watch its video. Be sure you have a Model Developer Edition of ExtendSim Pro installed on your computer. If you have not yet purchased and activated ExtendSim, you may use the Trial version. Just be careful not to begin your Trial period with the software any earlier than the week before the online course begins as you only have 30 days in your Trial period.

course materials to be mailed to each attendee prior to the course

- Course manual with case studies.
- Solution files for all course-based case studies and exercises.

after the course

- You'll receive a Certificate of Completion.
- Book of additional case studies with solutions for post-course practice.
- Plus, if you have a few more questions within the first year after completing this course, you qualify for a free online coaching session from your trainer.