

Circuit Simulation with Altium Designer

Introductory Tutorial

Course Synopsis

- Overview
- Brief history of SPICE & SIM in AD
 - How spice simulators work
 - Introduction to SIM in AD
- The schematic and simulation environment
- Capturing a schematic for simulation
- Component and simulation multipliers
- Your first schematic – a simple circuit
- Your first simulation
 - Transient analysis of simple RC circuit
- Bandpass filter example
 - Cross-referring symbols to SPICE models
 - Voltage sources, power ports & stimuli
 - Simulating the bandpass filter circuit
- The waveform viewer
 - Charts, waves and plots
 - Working with the waveform viewer
- Simulation libraries
 - The anatomy of a component
 - Organising libraries with Altium Designer
 - Creating a simulation-ready component
 - Overview of stimuli, voltage & current sources
 - Using the same symbol for simulation & PCB
- Simulation of basic electronics theory
 - Basic DC circuit analysis
 - Basic AC circuit analysis
- The SPICE netlist
- Digital simulation
- Advanced features
 - Setting initial conditions
 - Global Parameters
 - Using maths functions
 - Parameter sweeping
- Reference
 - Why won't my circuit simulate
 - Further reading and websites

Course Overview

A one-day course designed to provide hands-on and conceptual familiarisation with the features and operation of the Altium Designer simulation system. This course is a perfect complement to our other introductory tutorials for schematic capture and PCB layout with Altium Designer.

Who should attend?

Ideal for delegates just starting with circuit simulation, or for those requiring a more formal introduction to the concepts and operation of the system.

The Course

The tutor introduces each subject and outlines the underlying concepts. Delegates then proceed to complete hands-on exercises using the software. The tutor then summarises the session and highlights any potential pitfalls and/or common misconceptions. There will be plenty of opportunity for individual discussion and guidance.

Pricing & accompaniments

Our Circuit Simulation with Altium Designer Introductory course costs £695 per delegate (prices excl. VAT).

Price includes a comprehensive set of delegate notes, a certificate of attendance, plus refreshments and a buffet lunch. Please advise us if you have any special dietary requirements prior to attending our training courses.

Date and Venue

Held regularly at our training suite in Stanstead Abbots, Hertfordshire. Please see our website for the next course date.

The course starts at 09.30 and finishes approx. 16.30. On-site training may be accommodated on request, please contact us for details.

More information and reservations

Bookings are now being taken. To register your interest in attending, please complete the online [form](#) and Premier EDA Solutions will contact you to confirm your booking and payment details.

