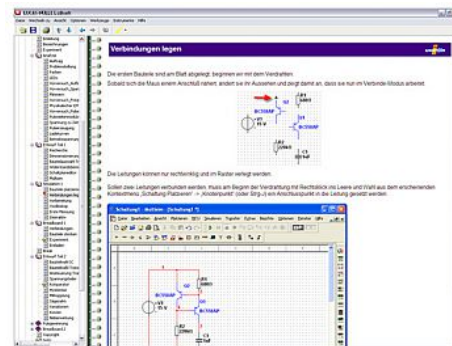# Course - Electronics 9: Circuit design using NI Multisim

Includes:

- Software NI Multisim Education Edition, single user license

- UniTrain breadboard with set of cables

- 2 sets of wired components

- CD-ROM with Labsoft browser and course software

Course contents:

- Design a PWM-controlled light mixer

- Consider alternative solution strategies

- Assess the cost-benefit ratio

- Select components

- Sketch a circuit

- Compute the component values

- Learn about a circuit simulation program based on NI Multisim

- Design a circuit diagram in NI Multisim

- Simulate the circuit's operation in NI Multisim

- Assemble the simulated circuit on the breadboard

- Perform measurements and tests on the breadboard circuit

- Compare the simulation with measured results of real circuit

- Evaluation and optimisation of the circuit

- Course duration: approx. 8 h