## Course Active filter with operational amplifiers

## Includes:

- 1 Experiment card with active low-pass 2-nd and 4-th order
- 1 Experiment card with active high-pass 2-nd and 4-th order
- 1 Experiment card with active band-pass and bandcut 2-nd order
- Labsoft and course software

## Course contents:

- Definition filter. Passive and active filter
- Bode plot
- Types of filters. High-pass, low-pass, band-pass and band-cut
- Order, slope, maxphase shift
- Tolerance pattern. Upper and lower cut-off frequency, attenuation
- Filter approximations. Bessel-, Butterworth- and Tshebysheff-filter
- Characteristic in the time domain. Delay time, rise time, transitive zone, stationary zone
- Low-pass and high-pass filter 2-nd order
- Low-pass and high-pass filter 4-th order
- Band-pass and band-cut 2-nd order
- Course duration: 5,0 h approx.

