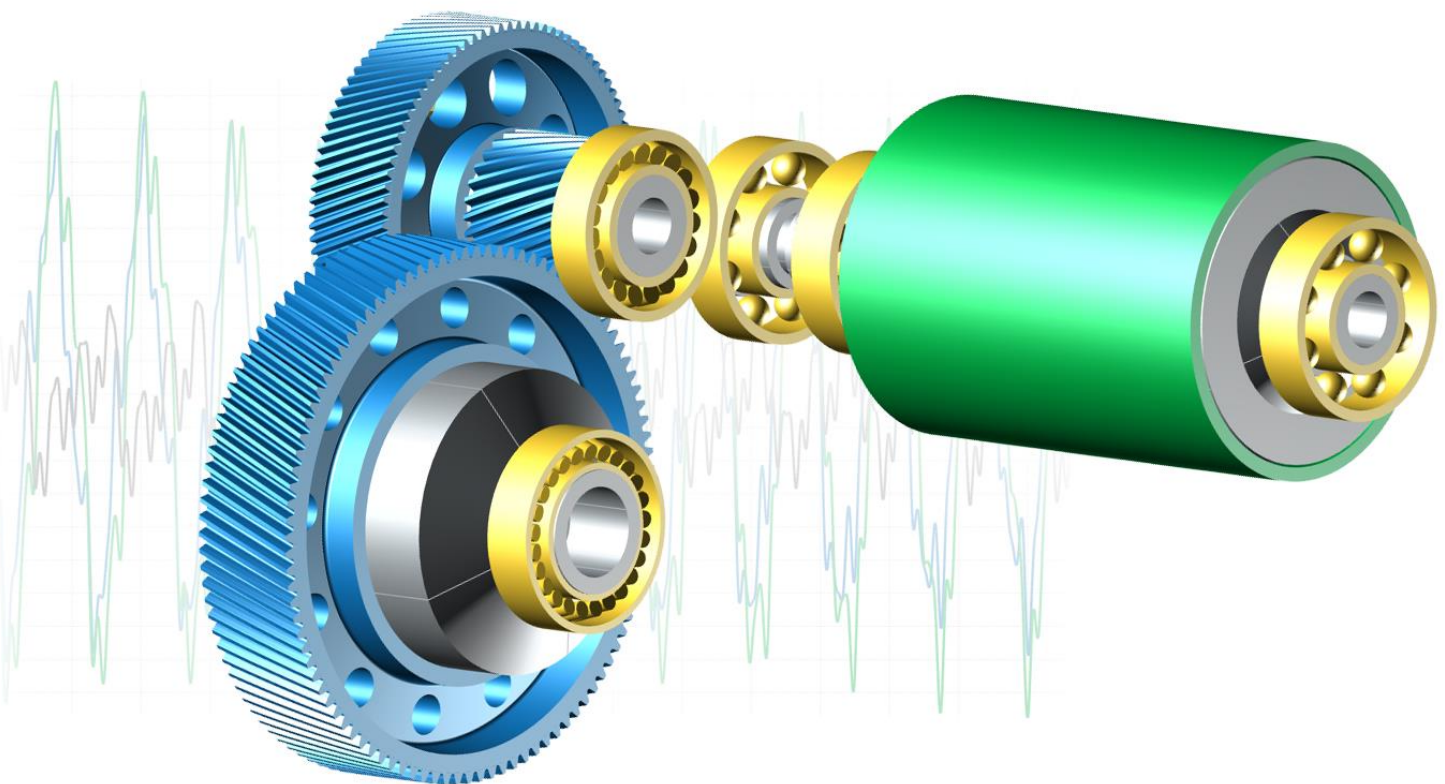# KISSsoft Training

KISSdesign – Package 3: Modal Analysis, Characteristic Frequencies and Forced Response

1 Day

Modal Analysis and Characteristic Frequencies

- Theory about modal analysis
- Calculating system eigenfrequencies
- Theory about characteristic frequencies
- Calculating different characteristic frequencies of gears, bearings and shafts
- Considering additional excitation frequencies
- Frequencies analysis in a Campbell Diagram

Forced Response

- Introduction to theory and new features
- Calculation settings for consideration of gear meshing forces, unbalanced masses and torque ripples
- Calculating the speed dependent dynamic factor for all active gear pairs
- Module specific settings for postprocessing the output results
- Outputs of dynamic bearings forces and moments in the time and frequency domains
- Outputs of shaft responses in the time and frequency domains
- Outputs of gear meshes in the time and frequency domains
- Generation of the Campbell diagram for bearing forces and moments