

Istec Category 1+ Vibration Training – Table of contents

The Istec vibration training consists of 8 modules, divided into 27 chapters. Each chapter has an individual training video. The training does not only consist of videos, but also includes written training material, and an (optional) exam and certificate. The table below provides an overview of the modules and chapters that are included in the vibration training. Note that the training is created in accordance with the ISO 18436-II Category 1, thus includes the chapters as specified by this standard.

Module	Chapter
1. Principles of vibration	1.1 Basic motion 1.2 Period & frequency 1.3 Amplitude (peak, peak-to-peak, RMS) 1.4 Parameters (displacement, velocity, acceleration) 1.5 Units, unit conversions 1.6 Time and frequency domain 1.9 Natural frequency, resonance, and critical speeds
2. Data acquisition	2.1 Instrumentation 2.3 Transducers 2.4 Sensor mounting, mounted natural frequency 2.9 Test procedures 2.11 Computer database upload/download 2.12 Recognition of poor data
3. Signal processing	3.5 FFT application
4. Condition monitoring	4.0 An introduction to condition monitoring 4.8 Fault condition recognition
5. Fault analysis	5.18 General fault recognition
6. Corrective action	6.7 Basic maintenance action
7. Equipment knowledge	7.1 Electric motors & generators 7.2 Pumps & fans 7.4 Compressors 7.6 Paper machines & steel rotating mills 7.7 Machine tools 7.8 Structures & piping 7.9 Gearboxes
8. Acceptance testing	8.1 Test procedure