



This course is intended for the vibration analyst who will:

- Collect vibration data
 - Validate that the data is good
- Set up the analyzer for routine data collection and special tests
 - Diagnose most of the common fault conditions
 - Perform special tests to validate unbalance, misalignment, resonance, looseness, and other conditions
- Know how to perform precision shaft alignment and balancing
 - Use the training and certification as the next step in a rewarding career as a vibration analyst

- Understand why phase analysis and time waveform analysis are both critical tools used by the vibration analyst
- Learn about common failure modes and how to detect them, including unbalance, misalignment, looseness, resonance, pump/fan/compressor vane, and flow issues, cavitation, turbulence, gearbox failures, rolling element bearing failure, and more
- Learn about high-frequency bearing and gear fault detection techniques: demodulation, enveloping, SPM HD, shock pulse, PeakVue, Spike Energy, and others

Duration

38 hours, typically over four days

Format

- Live public course
- On-site course
- Virtual online course
- Video distance learning online courses

What will you gain from Taking this course?

There is a great deal to learn, but it will help you to perform your role with confidence. In this course you will:

- Increase your knowledge on maintenance practices, condition monitoring, and the common condition monitoring technologies
- Increase your knowledge about data collection, testing techniques, sensor types, and so on
- Learn a great deal about signal processing and the settings of your vibration analyzer
- Increase your knowledge of spectrum analysis, time waveform analysis, and phase analysis

- Be able to use spectra, phase readings, time waveforms, bump and impact tests, to test for looseness, resonance, and other conditions about precision shaft alignment and soft foot correction
- Learn about single and two-plane balancing
- Learn the basics of setting alarm limits: band alarms, and mask/envelope alarms

The key is that with the VCAT-II course, you will transition from being a person who is primarily capable of collecting data to a person who can diagnose faults on the critical machinery, and in some cases, prevent or correct them.

Compliance:

- Training and certification: ISO 18436-2
- Certification: ISO 18436-1, ISO/IEC 17024
- Training: ISO 18436-3

Exam:

- Three hours
- 100 multiple-choice questions
- 70% passing grade
- Can be taken online or in-person at the course

Certification requirements:

- Training course completed
- 18-months of vibration analysis experience, verified by an independent person
- Pass the exam
- Valid for 5 years

