



Updated July 23, 2004

## **Applied Vibration Analysis - Rotordynamics Category IV**

***Follows Category IV Guidelines Established by ISO 18436-2, “Condition monitoring and diagnostics of machine – Requirements for training and certification of personnel – Part 2: Vibration condition monitoring and diagnostics”***

<b>Prerequisites:</b>	<b>Two years or more training in mechanical technology or mechanical engineering at an accredited college, university or technical school is strongly recommended. Candidates should be able to manipulate simple algebraic equations, use a basic scientific calculator, and be familiar with the operation of personal computers.</b>
<b>ISO Certification:</b>	<b>Requires this course plus the Category One, Two and Three courses, Category III Certification, 60 months experience, and examination</b>
<b>Course Length:</b>	<b>16 Hours</b>
<b>Certification Exam:</b>	<b>15 questions, 2 hours time limit, closed book but a summary sheet of formulae is provided, passing score is 75% correct</b>
<b>Maximum # Students:</b>	<b>15</b>

### **Course Objectives**

**Students who successfully complete this course will be able to:**

- **apply the basic principles of rotor-bearing dynamics to vibration diagnosis**



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## Syllabus and Seminar Schedule

### Day One

<b>8:00AM – 9:50AM</b>	<b>Rotor/bearing dynamics</b> <i>Rotor characteristics</i>
<i>9:50AM – 10:10AM</i>	<i>Break</i>
<b>10:10AM – 12:00PM</b>	<b>Practice Problems and Exercises</b>
<i>12:00PM – 1:00PM</i>	<i>Lunch</i>
<b>1:00PM – 2:50PM</b>	<b>Rotor/bearing dynamics</b> <i>Rotor characteristics</i>
<i>2:50PM – 3:10PM</i>	<i>Break</i>
<b>3:10PM – 5:00PM</b>	<b>Practice Problems and Exercises</b>

### Day Two

<b>8:00AM – 9:50AM</b>	<b>Rotor/bearing dynamics</b> <i>Bearing characteristics</i>
<i>9:50AM – 10:10AM</i>	<i>Break</i>
<b>10:10AM – 12:00PM</b>	<b>Rotor/bearing dynamics</b> <i>Bearing characteristics</i>
<i>12:00PM – 1:00PM</i>	<i>Lunch</i>
<b>1:00PM – 2:50PM</b>	<b>Practice Problems and Exercises</b>
<i>2:50PM – 3:00PM</i>	<i>Break</i>
<b>3:00PM – 5:00PM</b>	<b>Certification Examination</b>