

## **ROTATING MACHINERY FAULT SIMULATION LAB (Virtual Lab) (Lab Elective-I)**

I Semester

**Course Code: 19ME21M2**

<b>L</b>	<b>P</b>	<b>C</b>
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Course Outcomes: At the end of the course, the student will be able to

CO1: Interpret shaft misalignment and its effects

CO2: Demonstrate static balancing of rotary systems

CO3: Illustrate oil whirl and mechanical looseness through frequency spectrum

CO4: Solve various types of bearing defects

CO5: Test cavitation in centrifugal pump

### **List of Experiments:**

1. Machinery soft-foot
2. Diagnosis of shaft misalignment and its effects
3. Static balancing studies of rotary systems
4. Oil whirl monitoring
5. Mechanical looseness
6. Bearing defects of various types
7. Sympathetic vibrations and its effects
8. Effects of bent shafts on rotor performance
9. Cavitation of centrifugal pump

**WEB REFERENCE:** <http://vlabs.iitkgp.ernet.in/rmfs/>