

INT 148: F.A.M.E. MANUFACTURING CORE EXERCISE 5, MACHINE RELIABILITY

This course introduces the Federation of Advanced Manufacturing Education (FAME) MCE-5 (Manufacturing Core Exercise) for machine reliability. Students will learn how to use the process of Reliability-Centered Maintenance (RCM) to drive for zero downtime and reach for maximum Heijunka. Students will be given an in depth understanding of Heijunka (Japanese for “leveling”), as a process that maintains a balanced relationship between predictability by leveling demand, flexibility by decreasing changeover time and stability by averaging production volume and type, over the long-term. The RCM process will be clearly defined with experiential exercises reinforcing comprehension and application of the following core questions:

1. What are the functions of the equipment?
2. How does it fail?
3. What causes it to fail?
4. Does it matter if it fails?
5. What can be done to predict or prevent each failure?
6. What if the failure cannot be prevented?

Credits: 1

Lab Hours: 0

Lecture Hours: 1