

Applied Mechanical Systems



Level 2

The **Applied Mechanical Systems** certification provides hands-on training in the installation, operation, maintenance, and troubleshooting of key mechanical components found throughout industrial systems. Learners will work with industrial-grade gears, bearings, couplings, ball screws, and seals to understand their function and integration in machinery. Through safe and structured labs, students develop the ability to align shafts, reduce system backlash, and apply mechanical power transmission concepts in real-world contexts.

This certification is ideal for those pursuing roles in manufacturing, maintenance, and mechatronics, and builds on Level 1 mechanical system knowledge.

Industry Recognized Certification Topics

- Bearings and Seals
- Shaft Alignment and Couplings
- Ball Screws and Linear Bearings
- Clutches and Brakes
- Mechanical Assembly and Maintenance Practices

Industry Recognized Certification Competencies

- Mechanical Drive Installation & Identification
- Component-Level Familiarization
- Shaft Alignment and Coupling Techniques
- Ball Screw Analysis and Adjustment
- System Lubrication and Maintenance
- Coupling Types and Applications

Units - 6 / Labs - 5

