### Course Competency

**Competency 1:** The student will learn the regulatory controls and oversight required by national and international governmental entities over Maintenance Repair and Overhaul (MRO) operations by:

1. Determining the national and international regulatory requirements of conducting MRO operations for both domestic and international airlines.
2. Implementing effective internal testing operations to assure routine compliance with maintenance service requirements.
3. Establishing effective procedures to address the inspection of certified aircraft parts and the corresponding program to prevent the use of fraudulent or defective parts into airline maintenance programs.
4. Initiating performance metrics to establish operational efficiencies and effective financial oversight.

**Learning Outcomes:**
- Communication
- Numbers / Data
- Critical thinking
- Information Literacy

**Competency 2:** The student will learn about the operational functions performed by Maintenance Repair and Overhaul (MRO) entities by:

1. Identifying the various roles that an MRO provides for an operating airline, including maintenance, parts replacement, engine overhaul, and routine repairs.

**Learning Outcomes:**
- Communication
- Numbers / Data
- Critical thinking
- Information Literacy

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2. Identifying best practice interactions that will occur between airline management and MRO personnel.
3. Identifying the effectiveness and cost differentials in outsourcing essential MRO operations.
4. Initiating effective financial controls to maintain the cost effectiveness for the delivery of maintenance services to an airline.

**Competency 3:** The student will learn about the impact that a logistics and supply chain support network provide for MRO's by:

- Communication
- Numbers / Data
- Critical thinking
- Information Literacy

1. Integrating logistics principles into the delivery of high quality maintenance services.
2. Establishing effective inventory control programs to maintaining the efficient delivery of consumable aircraft parts and components.
3. Creating an effective supply chain network to maintain an efficient and cost effective delivery of aircraft maintenance services and parts.
4. Identifying an international network of supply chain manufactures to facilitate the timely delivery of consumable goods and services to airline partners.

**Competency 4:** The student will learn about the personnel organizational make-up of a MRO and will learn the best personnel practices that positively enhance an MRO's operations by:

- Communication
- Numbers / Data
- Critical thinking
- Information Literacy

1. Identifying those personnel educational requirements and work experiences that provide for the most qualified and effective workforce for MRO's.
2. Determining the testing and continuing educational programs that are needed enhance the professional qualifications and performance of MRO employees.
3. Identifying those human factors that impact MRO employees work performance evaluations.
4. Integrating a work safety program to enhance employee performance and efficiency.