

# **Manufacturing Specialist / Manufacturing Technician**

## **2020-2021**

**Time/place** Asynchronous and in Class

**Instructor** Mr. Ken Koleszar

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\*\*\* email is preferred method of contact. Canvas can also be used.

**Office Hours** by appointment on Fridays

**Textbook** None- Manufacturing Skills Institute Learning Platform (Online Platform) / Canvas/ Flash Drive

**Co-requisite** None

### **Description and Goals**

The Manufacturing Specialist (MS) Certification is a portable and stackable industry credential that demonstrates to employers anywhere in the world that an individual has attained a certain level of industry-wide technical skills in the Math and Measurement; and Spatial Reasoning and Manufacturing Technology categories.

Achieving the MS Certification equates to successful completion of Sections One and Two of the three-part Manufacturing Technical Level 1 Assessment and measures individual skill attainment in the following nine core manufacturing skills essential to all production-related occupations in modern manufacturing:

### **Course Topics**

- Measurement
- Algebra for Manufacturing
- Math for Quality
- Spatial Reasoning
- Mechanics
- Fluid Power and Thermodynamics
- Electricity
- Chemistry
- Manufacturing Processes and Controls
- Quality and Lean Manufacturing Concepts
- SPC Basic Concepts
- Business Acumen

## Course Outcomes

### The objectives of Manufacturing Specialist are:

To develop a workforce pipeline capable of meeting the requirements of existing and emerging employers in advanced technology industries such as manufacturing

Provide a customized fast track, pathway to a stackable credentials for 21<sup>st</sup> century advanced technology careers in industry.

Provide online and instructor-led training to address identified technical skill gaps.

Provide a pathway to advanced level training and specialized training based on industry requirements for potential new hires and incumbent workers.

**Homework:** Homework reinforces concepts discussed and practiced in class. Students are responsible for completing LABS and homework. Homework is due two class meetings after being assigned. After the due date, there will be a 10% grade reduction for every class late, up to 20% then it becomes 0%. Labs are to be turned in after completion.

## Grading

Homework / Classwork / Lab work will be averaged  
**5% per day late fee, Up to 20%.**

MSI's MS or MT-1 test = 4 x Homework

Quizzes 3 x Homework

**Final Grades** 90 - 100 **A**, 80 - 89 **B**, 70 - 79 **C**, 60 - 69 **D**, Below 60 **F**

## Suggestions for Success:

1. Get and use a calculator for all calculations.
2. Complete all homework to the best of your ability. Since you have a meeting before it is due, work on it, before the next meeting, and have me clarify any questions you may have. Then you can complete it before the due date.
3. Take detailed notes. Writing material helps cement information into your memory.
4. Complete and turn in all labs and Homework.
5. If you don't understand something, **ASK QUESTIONS!!**
6. Go through **ALL** of the online platform material from MSI. / Canvas or Flash drive, Two or more times is best.
7. Study and practice problems a minimum of 15 min. **EVERY** night instead of trying to cram then do a total review before any evaluation.
8. Please be in class as Often as Possible!
9. Students are responsible for all material covered and assignments, regardless of absences.

- 10 Students' improper behavior or disturbing the class will not be tolerated!
- 11 Student safety is our number one concern.
- 12 Follow all machine safety protocols.
- 13 Wear your mask within 6' of others.