

Multi-State Advanced Manufacturing Consortium

US DOL SPONSORED TAACCCT GRANT: TC23767

RELEASE DATE

VERSION v 002

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08/06/2015

Course Outline - Industrial Math

Course Topic: Industrial Math

Recommended Contact Hours: 45 hours

Course Description:

Industrial math is designed to provide the technical student with a core set of mathematical skills that are required to perform a variety of industrial jobs including technicians and the skilled trades. The content and difficulty of the course will move from simple to more complex mathematical functions. Many of the problems used in this course are based on manufacturing drawings and schematics. This course will include a review of basic Algebra, advanced Algebra (more commonly known as Algebra II), plane geometry and an introduction to the fundamentals of trigonometry

Course Outcomes and Objectives

- IM-1 Perform basic algebraic equations
- **IM-2 Solve for simple equations**
- **IM-3 Solve complex equations**
- IM-4 Demonstrate how to graph linear equations
- **IM-5 Solve quadratic equations**
- IM-6 Demonstrate the use of thermos and axioms
- **IM-7 Solve angular measurement problems**
- **IM-8 Solve triangular problems**
- IM-9 Solve various shape problems including congruent shapes, polygons and Circles
- IM-10 Solve for area, volumes, weight of various figures
- IM-11 Solve basic trigonometry problems
- IM-12 Solve trigonometry function problems with right triangles





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IM-13 Solve trigonometry word problems

IM-14 Solve problems with vectors

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