Manufacturing Mathematics

Date: Wednesdays, March 17 - May 19, 2021 (10 weeks)
Time: 3:30 - 5:30 p.m.
Cost: $499 (required textbook and scientific calculator not included)
(Mathematics for Machine Technology by John C Peterson, Robert D Smith, ISBN:1337798312)
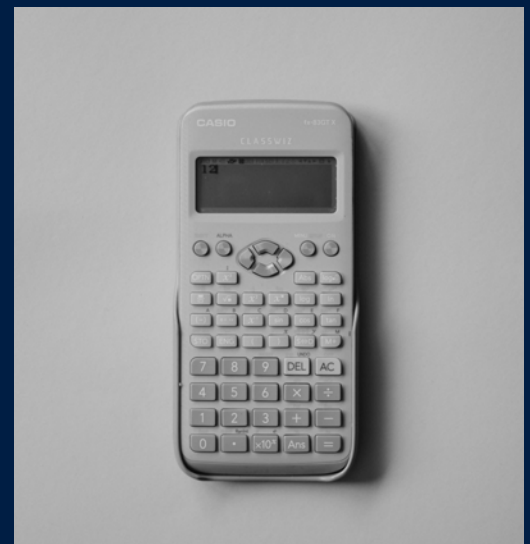**Instructor: Jason Zimmerman, Adjunct Faculty, Penn State New Kensington**
Suggested Audience: Employees needing to sharpen or review their shop math skills.

In order for manufacturers to be competitive domestically and globally, their quantitative skills in math and technology need to be kept current. The goal of this class is to reinforce math skills and to apply math to everyday manufacturing scenarios. The use of real industry examples will be used throughout the course. (*this course will be virtual via Zoom*)

Topics:

- **Rectangular and circular areas and volumes**

- **Pythagorean Theorem**

- **Ratios and proportions**

- **Angular calculations using Decimal Degree and Degree Minute Second**

- **Basic and easily-followed trigonometry**

- **Law of Sines to find missing leg sizes and angles for non 90-degree triangles**

- **Right triangle trigonometry**

- **Analyzing sample blueprints and sketches**

- **Measuring hand-sketched drawings of basic machine parts on graph paper**

- **Gear ratios and RPM calculations**

MATH 7537 Basic Shop Math II

To register or for more information:
Call 724-334-6011 or email bxn10@psu.edu

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