

Blueprint Reading, Shop Mathematics, Geometric Dimensioning & Tolerance - Course Outline

- General Orientation, Introduction to Blueprint Reading, What is a Print? Prints on the Job, Parts of a Print, Title Block, Print Body, Simple Prints
- Line Conventions, Meaning and Precedence, Tools & Techniques,
- Shop Math: Review of Basics, Addition, Subtraction, Multiplication, Division, Computing with a Scientific Calculator. Review of Basics, Order of Operations, Fractions, and Computing with a Scientific Calculator,
- Multi-view Prints, Projecting Views, View Selection, Visualization, Auxiliary Views, Math: Review of Basics, Order of Operations, Fractions, and Computing with a Scientific Calculator,
- Common Fractions, Mixed Numbers, Common Fractions and Mixed Numbers, , Decimals: Introduction, Equivalent Decimals and Common Fractions, Conversion, Combined Operations, Decimals, Common Fractions and Mixed Numbers, Combined Operations, Computing with a Scientific Calculator.
- Interpreting Print Dimensions, Basic Rules for Reading, Basic Rules of Dimensioning, Dimensional Forms, Tolerance and Allowance, Tolerancing Terms, Computing with a Scientific Calculator.
- Geometric Dimensioning & Tolerancing: Introduction, Feature Control Frames, Feature Control Symbols, Supplementary Symbols, Progress Status Evaluation: Class Exercise.
- Datum Feature Symbols Identification, Datum Target Symbols, Datum Axis, Datum Center Plane, Material Condition Symbols, Interpreting Modifiers
- Geometric Dimensioning & Tolerancing, Interpreting Form Tolerances, Interpreting Profile Tolerances, Interpreting Orientation Tolerances, Interpreting Locational Tolerances, Interpreting Runout Tolerances.