

Secondary Scope & Sequence

- ⊙ Technical - Major units and levels with estimated hours
- ⊙ Academic - Recommended

Subject – Hours	Level I	Estimate of Hours	Level II	Estimate of Hours	Level III	Estimate of Hours	Level IV	Estimate of Hours
Technical	ORIENTATION / SAFETY - IDENTIFY MACHINE PROCESSES AND PROPER OPERATING PROCEDURES	20	ORIENTATION / SAFETY - IDENTIFY AND EXPLAIN MSDS INFO	20	EXPLAIN AND IDENTIFY RIGHT-TO-KNOW LAW	20	IDENTIFY AND EXPLAIN POTENTIAL HAZARDOUS TRADE MATERIALS	20
	BENCHWORK and LAYOUT - CUT MATERIAL WITH A HAND HACKSAW	50	BENCHWORK and LAYOUT - FILE WORK TO SPECIFICATIONS	40	POWER SAW - REMOVE AND REPLACE SAW BLADE	30	SHOP MATH - TRIG	40
	BASIC POWER SAW SAFETY	40	DEMONSTRATE ACCURATE SAWING TO A SCRIBED LINE	35	PART INSPECTION - BLUEPRINT READING - IDENTIFY AND EXPLAIN LINES, DIMENSIONS, TOLERANCE, AND FIT	20	METALLURGY	35
	PART INSPECTION BLUEPRINT READING - DEMONSTRATE BASIC SKETCHING AND DIMENSION	50	PART INSPECTION BLUEPRINT READING - IDENTIFY AND EXPLAIN VIEWS AND PROJECTIONS	25	DEMONSTRATE USE OF DRILLING MACHINE	40	DEMONSTRATE COUNTERBORING, SPOTFACING AND COUNTERSINKING	30
	DRILL PRESS SAFETY	90	DEMONSTRATE USE OF CENTER DRILLS	70	OPERATING LATHES - TURNOUT SIDE DIAMETER	55	OPERATING LATHES - CUT EXTERNAL THREADS	40
	LATHE SAFETY	50	OPERATING LATHES - FACEWORK PIECE	75	OPERATING MILLING MACHINES - DEMONSTRATE CLIMB AND CONVENTIONAL MILLING	60	OPERATING MILLING MACHINES - DEMONSTRATE TRAMMING OF HEAD	50
	USE OF CHARTS & REFERENCES	20	OPERATE MILLING MACHINES SAFETY	75	MAINTAINING MACHINES & TOOLS	35	OPERATE GRINDING MACHINES DEMONSTRATE TEST MOUNT AND GRINDING WHEEL	30
	SHOP MATH - FRACTIONS	40	OPERATE GRINDER MACHINES-GRINDER SAFETY	20	CNC PROGRAMMING - DEMONSTRATE BASIC USE OF G&M CODES	100	CNC PROGRAMMING - POST AND TRANSFER FILES TO AND FROM CNC MACHINES	115
English (4)	College Prep English I		College Prep English II		College Prep English III		College Prep English IV	
Math (3)	Algebra I		Algebra II		Geometry		Higher Level College Prep Math (recommended)	
Science (3)	Biology		Chemistry		Physics			
Humanities (covering these courses in any order) (3)	Civics		U.S. History		World History			
Other	Foreign Language I (recommended)		Foreign Language II (recommended)					