

BASIC ELECTRICAL THEORY - This 24 hour course is designed for the beginner student interested in entering the electrical field. The class will cover electrical safety and progress through basic electrical theory; electrical quantities and Ohm's Law; series, parallel, and combination circuits; measuring instruments; wire tables; magnetic induction; alternating current; transformers; and motors. A skills manual is included in the course.

PROGRAMMABLE LOGIC CONTROLLERS (PLC) - This 24 hour course takes a practical approach to installing, programming and troubleshooting the PLC 5. AC I/O, DC I/O, BCD signals, moving data timing charts, and more will be covered. A skills manual is included in the course.

THREE PHASE MOTOR CONTROLS - This 24 hour course offers students the opportunity to learn concepts critical to the industrial and commercial electrician. It is ideal for individuals interested in updating and broadening their electrical skills. Covers basic electricity, 3 Phase power circuits, wiring of motors, control circuits, and motor control blue prints. Electrical Lab boasts state of the art training equipment and includes live work on a GE three phase buss.

MACHINE TECHNOLOGY - This 24 hour course is a multi-level machine tool theory and operation. It is a hands-on course featuring lathe and milling machine operation. Instruction will cover fixturing, set up, operating techniques, safety, tooling, speeds and feeds.

WELDING (S.M.A.W./G.M.A.W./G.T.A.W.)

In this 24 hour course, students will receive instruction in the theory and practice of electric welding, as well as welding flat and horizontal position with mild steel electrodes (7018, 6010, 7014). Students also receive basic instruction in MIG/TIG processes and gain experience in welding aluminum, stainless steel, and mild steel.

BUILDING TRADES MAINTENANCE

This 24 hour course will give students an opportunity to earn Starrett industry recognized certifications in the area of precision measurement as well as a chance to learn woodworking and metalworking machine safety, basic plumbing and electrical skills.

BLUEPRINT READING AND INTRODUCTION TO AUTOCAD

In this 24 hour course, students will learn the basics of Blueprint Reading as well as AutoCAD. During the Blueprint component of the course, students will learn components, scale, linetypes, symbols, and dimensions of a blueprint. Students will also learn about several different types of drawings. The second component of the class will include learning AutoCAD. Students will learn about the basic interface of AutoCAD as well as how to draw using the program.

HYDRAULIC AND PNEUMATIC SYSTEMS

In this 24 hour course, students will learn the basics of Hydraulic and Pneumatic Systems. Topics will include: Fluid power systems and fundamentals; the basics of hydraulics; hydraulic systems and components; fluid power actuators; pneumatic system concepts and components; electro pneumatic components. If time permits – the design of hydraulic circuits and pneumatic circuits.