

Manufacturing Essentials

This program delivers essential skills to students who are interested in entering an Automated Systems training path through Workforce & Continuing Education. Successful completion of this program is a prerequisite for entering into a career pathway. The program assures that students are prepared to undertake the rigors of such a training program. A student must achieve competency in all modules to receive this certificate and be considered for admittance in a career pathway training program.

Non-Credit Course Code	Course Title	Hours	Days
OSHA 8001	OSHA 10 – Safety training	16	2
CMTH 8008	Shop Math	24	3
CBPR 8013	Blueprint Reading/GD & T/Metrology	40	5
A certificate of completion will be awarded to students who successfully complete the above courses.		80 hours	10 days

Non-Credit Course Descriptions

OSHA 10 – OSHA 8001- 16 hours

Prerequisite: None

This sixteen (16) hour training course covers basic industrial safety. Topics include lockout/tagout, personal protective equipment, aerial lift and fall safety, machine guarding, confined space safety, fire safety, hazardous materials and hazard communications. General shop safety including forklift pedestrian safety will also be discussed. Upon successful completion participants receive an OSHA 10 certification.

Shop Math – CMTH 8008 – 24 hours

Prerequisite: None

This twenty-four (24) hour course teaches students the fundamental math functions used in machining. The course will cover basic fractions and decimals as well as basic triangle and circle geometry relevant to the shop.

Blueprint Reading/GD&T/Metrology – CBPR 8013 – 40 hours

Prerequisite: None

This forty (40) hour course is designed to provide the skills required for blueprint reading, geometric dimensioning and tolerance, and metrology. The course provides an understanding of blueprints, geometric dimensioning controls used on mechanical engineering drawings, and precision measurement tools.