

CLASS DATES, TIMES AND LOCATIONS

BOULDER COUNTY CAMPUS AT LONGMONT

2/6/12—5/30/11

Mon & Wed 6:00pm to 9:00pm
& 8 Saturdays
9:00am to 1:00pm

No class the week of 3/19/12

CAMPUS LOCATIONS:

Boulder County Campus in Longmont
2190 Miller Drive
Longmont, Co

FOR MORE INFORMATION OR TO REGISTER:

Visit www.frontrange.edu/mantech

☎ 303.404.5462

✉ Email Veronica Chavez at veronica.chavez@frontrange.edu



Learn more at FrontRange.edu/ManTech



TECHNOLOGY FOR MANUFACTURING & ENERGY

A training program developed with regional employers for people seeking a new career or skills upgrade in manufacturing and clean energy industries



Learn more at FrontRange.edu/ManTech

TECHNOLOGY BASICS FOR MANUFACTURING & ENERGY

This program was designed with input from regional manufacturing and energy companies as an introduction to the fundamental skills required in today's manufacturing environment. Content incorporates technical and soft skills training with industry presenters and interactive learning.

PROGRAM CONTENT

THE KEY TO SUCCESS IN TODAY'S WORKPLACE

A CONVERSATION WITH THE EMPLOYERS

Technical skill and experience are important, but success in the workplace depends largely on adaptability, ethics, willingness to learn new skills and good communication and teamwork. Managers from regional employers will participate in a discussion about the changing workplace and the significance of cultural fit in a company.

INTRO TO LEAN MANUFACTURING PRINCIPLES

An overview of key concepts used in a lean manufacturing environment, including Kaizen, value stream maps, KANBAN, and visual factory management. Students will participate in a lean manufacturing simulation.

SAFETY FOR MANUFACTURING ENVIRONMENTS

Federal and state regulations and industrial practices. Covers hazard communication standard, lockout/tagout procedures, eye safety, lifting techniques, electrical safety, stored energy safety, personal protective equipment, safety program development and monitoring. Upon successful completion of this course, participants will receive an OSHA Card.

INDUSTRIAL MEASUREMENT

The basic units of industrial measurement: surface, fluid, temperature and pressure, including introduction to devices used such as mechanical pressure gauges and electromechanical sensors. Emphasis will be placed on linear measurements and the use of precision measuring tools including calipers, micrometers, and spring tempered precision rules, etc.

BASIC BLUEPRINT READING & INTRODUCTION TO GD&T

Fundamentals of blueprint reading techniques related to manufacturing operations. Topics include basic drafting standards, sketching, symbol interpretation and dimensioning standards. Instruction will also touch on the core principles and application of Geometric Dimensioning and Tolerancing (GD&T).

BASIC MFG MATERIALS & PROCESSES

An overview of 21st century manufacturing processes – from engineering to product shipment. Additionally, participants will be introduced the types, properties and behavior of a variety of materials, including an introduction to the classifications, properties and behaviors of ferrous and non-ferrous metals, polymers, woods, ceramics, chemicals and advanced materials.

COMMUNICATION & TEAM WORK

Participants will identify personal behavioral preferences in the workplace, including individual strengths and areas for improvement. Classroom activities will help to increase appreciation of different styles in the work environment in order to enhance teamwork. Additionally, participants will discuss strategies for minimizing potential conflict with others.

Electives

PROGRAMMING & MACHINING FUNDAMENTALS

The course is an Introduction to G code programming language and machining skills to operate today's CNC machinery. Students will learn to program a computer, design a part on CAD, and complete the manufacturing process. Students will also develop the skills for operating equipment in the precision machining industry. Participants will learn skills in fabrication and parts manufacturing that meet industrial standards.

Clean Energy Technology

Students will be introduced to basic skills and technology needed in the energy industry. Course will include basic electricity, and trends in wind, solar, biofuels, and smartgrid.

PROGRAM COST: \$1995.00 per person

Inquire with Corporate Solutions about training grants for eligible participants