

ADVANCED MANUFACTURING

MECHATRONICS FUNDAMENTALS - PART I & II

WorkKeys Assessments: AM (level 5); LI (level 4); RI (level 4)

This four-course credential program is intended for students with some manufacturing skills or applicable military skills and prepares graduates for entry-level positions in local manufacturing companies that utilize automated, computer controlled production systems. Program ends with the ACT National Career Readiness Credential assessment.

DCB 2073-03

See individual course schedules below.

\$1,226

MECHATRONICS FUNDAMENTALS - PART I

MATHEMATICS FOR MANUFACTURING

Strengthen mathematic skills needed for the set-up and operation of machine tools and computer numerical control (CNC) programming. Mathematical operations including fractions, exponents, basic algebra and trigonometry will be reviewed. Prerequisite: Basic Mathematics. **Instructor: R. Eckmann**

DCB 2064-02

T

1/31-3/7

6:30-8:30pm

KSU

\$199

INTRODUCTION TO BLUEPRINT READING

Participants will learn to identify the essential details and interpret the dimensions and tolerances found on engineering drawings. Actual blueprints for hands-on study will be available. This hands-on program will enable participants to accurately and effectively use blueprints to obtain the information they need to do their jobs. Course is geared for machine operators, quality control inspectors, shop supervisors, metalworking manufacturing personnel, engineering managers, and other manufacturing persons interested in learning to read manufacturing prints or updating their knowledge in this area. **Instructor: R. Engle**

DCB 1259-07

R

2/9-3/16

6:30-8:30pm

KSU

\$249

ELECTRICAL THEORY I BASICS

Learn electrical theory basics for a variety of professional fields including the manufacturing field. Course will cover basic electrical distribution, identifying and selecting electrical equipment, sizing wires and overcurrent protection, an introduction to the National Electrical Code, installing wires and conduit, theory of series and parallel circuits and measuring voltage and current. This course includes a lab component.

Instructor: J. Novak

DCB 1947-30

T/R

3/21-4/4

6-9pm

KSU

\$149

MECHATRONICS FUNDAMENTALS - PART II

PROGRAMMABLE LOGIC CONTROLLERS (PLC) - I

This course contains an overview of Allen Bradley controller architecture, hardware, programming, ladder logic and troubleshooting. The course includes a hands-on lab component. Course is appropriate for engineering students who are looking to gain knowledge in this area as well as for engineers looking for professional development hours. This course includes a lab component. **Instructor: D. Lord**

Suggested Prerequisite: Electrical Theory (see above)

Approved for 24 PDHs • Equipment: Laptop (suggested but not required)

DCB 1024-09

M

3/20-4/24

5-9pm

KSU

\$599

MECHATRONICS ASSESSMENT

ACT NATIONAL CAREER READINESS CREDENTIAL ASSESSMENT

Certifying essential work skills is important in today's competitive world. This portable credential measures skills that employers feel are essential to success in the workplace. Students will register for both the WorkKeys Assessment and the National Career Readiness Credential.

DCB 1846-05

Open enrollment

Free

DCB 1849-05

R

4/27

5:30-8:30pm

KSU

\$30