# VIRGINIA WESTERN COMMUNITY COLLEGE OFFICE OF DUAL ENROLLMENT REGIONAL ACADEMY MECHATRONICS 2023-2024

Monday – Friday 8:00 – 10:45 (refer to class schedule in SIS for actual times) Two-Year Program designed for Juniors and Seniors in high school \*Refer to the VWCC Website for current tuition rates in effect at time of enrollment.

**Purpose:** This curriculum is designed to challenge the student with hands-on instruction in mechanical, electrical and computer systems in preparation for employment in advanced manufacturing or many areas of high tech.

Program Admission Requirements: High School GPA of 3.0+ and completion of Algebra II with a grade of "C" or higher

NOTE: Students will need to review the College Catalog to determine individual course pre-requisites and/or course requirements for the Mechatronics: Technology in Mechatronics CSC, 221-736-01, and/or the Mechatronics: Advanced Technology in Mechatronics CSC, 221-706-90. Degree progress can be found in the student's MYVWCC SIS portal.

# **ACADEMY COURSES\***

### **FIRST SEMESTER**

SDV 101- Orientation to Engineering and Mathematics (2 CR)
MTH 111- Basic Technical Mathematics (3 CR) OR MTH 167 (5 cr)
MEC 195 – Topics in Mechatronics Applications & Methods (3 CR) (replaces EGR 216)

## SECOND SEMESTER

CAD 111- Technical Drafting I (3 CR) MEC 113- Materials and Processes of Industry (3 CR) MTH 131- Technical Mathematics (3 CR)

#### THIRD SEMESTER (optional semester beyond formal 1-year academy program)

MEC 162- Applied Hydraulics and Pneumatics (3 CR) ETR 113- D.C. and A.C. Circuits (4 CR)

## Please refer to the VWCC on-line College Catalog for course descriptions.

\* The semester course schedule may be altered based on faculty and lab space availability at the college.