

# Energy & Manufacturing Systems



## TWO-YEAR PROGRAM - 900-hour program

### IN PARTNERSHIP WITH APS, PALO VERDE & ESTRELLA MOUNTAIN COMMUNITY COLLEGE

- Utilize emerging technologies to sustainably meet increasing energy demands.
- Design, construct, and maintain industrial, mechanical, electrical, and automated systems.
- Identify and apply creative solutions, as part of a team, to complex engineering challenges.

## PROGRAM REQUIREMENTS\*

- Current Sophomore, Junior, and Senior students may apply
- One credit of English with a C or better
- One credit of Math with a C or better
- Copy of unofficial transcript
- Proof of residency in West-MEC district boundaries
- Copy of birth certificate and immunizations/State Exemption Form due at the time of enrollment
- Students who do not meet program requirements may apply under a "Student Success Action Plan" through their high school counselor.
- Transportation is not provided by West-MEC. Families are responsible for providing transportation to and from West-MEC.

\*Program requirements are subject to change per industry age restrictions, credentials requirements, and administrative discretion.

**Meeting application criteria does not guarantee enrollment.**

## COST REQUIREMENTS

Upon enrollment into the program:

- \$150.00 non-refundable registration fee includes enrollment processing, supplies, leadership development, & uniform shirts. Other uniforms/supply requirements are the responsibility of the student.
  - Leadership development training is embedded through membership and participation in the Career and Technical Student Organization | Skills USA.
- It is recommended that students have access to a personal computer and reliable internet outside of class to complete assignments and projects.
- The dress code is reviewed annually to meet professional industry standards. Dress code requirements will be addressed prior to the start of classes.
- Optional dual enrollment will result in additional fees.
- After Early Graduation, Graduation, or GED completion, registration fee and tuition will apply\*
- Empowerment Scholarship Account (ESA) recipients may select West-MEC as an approved vendor\*

\*Details regarding additional tuition costs are available [Tuition Payment Agreement](#).

## INDUSTRY CERTIFICATION

TEST FEES PREPAID BY WEST-MEC

- This industry credential is preferred for employment in the field a majority of the time is sought after by employers, candidates with this industry credential are likely to be given priority in hiring over others who do not hold it
  - National Coalition of Certification Centers (NC3)
    - Fundamentals of Mechanical Systems Level 1 and Applied Mechanical Systems Level 2
    - Fundamentals of Fluid Power - Hydraulics/Pneumatics Level 1 and Applied Fluid Power Technology Level 2
    - Fundamentals of Electricity - AC/DC
    - Applied Motor Controls
    - Fundamentals of Industry 4.0 Smart Sensors
    - Fundamentals of PLCs and Sensor Technology and Applied PLC Technology II
    - Introduction to Mechatronics Industry 4.0
    - Fundamentals of Robotics and Applied Robotics
  - OSHA-10 General

## CAREER PATHWAYS

- Graduates of this program should qualify for a variety of careers as an on-the-job trainee or apprentice in fields such as Robotics Technician, Automation Technician, Electrical and Instrumentation Technician, Electronics, Process Controls, and Mechanical Technician, Engineering Technician, Power Plant Generation, Industrial Plant Operations, and Energy Transmission and Distribution, CTE teacher\*
- Entry level salary range: \$18.32 - \$28.60 per hour\*\*

\*with additional education in this pathway | \*\*Bureau of Labor Statistics, Occupational Employment & Wages

Program information may change as West-MEC strives to provide the best opportunities for students. Refer to [www.west-mec.edu](http://www.west-mec.edu) for the most current information. Program is taught by industry-certified instructors. West-MEC does not discriminate on the basis of race, color, national origin, gender, age, or disability in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of their operations.



## LOCATION & HOURS

### West-MEC Southwest Campus:

500 N Verrado Way  
Buckeye AZ 85374  
623.872.6260

### Monday - Friday

1st Year: 7:00 AM - 9:30 AM  
1:00 PM - 3:30 PM  
2nd Year: 7:00 AM - 9:30 AM  
1:00 PM - 3:30 PM

**NOTE: West-MEC & high school calendars may not align & transportation is provided by the student/parent.**

## ENROLLMENT INFORMATION

- Acceptance into West-MEC programs may be competitive.
- Students may only be enrolled in **one** West-MEC Central Program at a time.
- The order for filling seats by grade level is as follows:
  - Current Sophomores
  - Current Juniors\*
  - Current Seniors\*
- Applications are ranked, in part, by attendance, GPA, discipline, and career choice (ECAP)
- Program hours are not excused for participation in extracurricular activities, athletics, vacation, or employment.
- West-MEC priority application submission date is in February. Contact your school counselor for your school's application deadline.
- West-MEC provides accommodations and modifications identified in the IEP/504 for high school students. Students who graduate from high school or have a GED will not be eligible for IEP services. Graduated students will need to self-advocate for reasonable accommodations which are aligned with industry certifications.

## STUDENT SUCCESS INDICATORS

- History of good attendance and discipline, and on track for graduation
- Strong interest in chosen career pathway
- Manual dexterity and physical ability to use tools, equipment, and machinery
- Ability to get along with other students and cooperate with the instructor
- Ability to work accurately/follow procedures to an industry-standard
- Strong technical reading and study skills; the textbook for this course is written at the college reading level

## GRADING SCALE

Grade	A	B	C	D	F
Percent	90%-100%	80%-89%	70%-79%	60%-69%	59% or below

## CREDITS ISSUED BY WEST-MEC

- High School - 6 elective credits (credits are awarded each semester)
- This program satisfies AZ university's admissions requirements. (AZ Board of Regents CTE/Fine Arts credit)

## EARLY COLLEGE PATHWAYS (OPTIONAL)

West-MEC offers a faster way forward through early college pathways, and we strive to provide robust post-secondary opportunities for students. For more information on Early College Pathways applicable to your program, check out our website on:

- [Early College Pathways](#)



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