

# MILLWRIGHT

## ASSOCIATE IN APPLIED SCIENCE (AAS) DEGREE

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DESCRIPTION: This program meets industry standards for this skilled trade, preparing students to work in an industrial setting with installation and maintenance of hydraulics, pneumatic equipment, power trains, belts, gears, and chains. The program also includes course work in industrial electrical maintenance to allow for cross-training as a millwright/electrical maintenance technician. Students will also earn basic and advanced millwright certification upon successful completion of the program. The Apprentice (APP) courses for this program of study are offered primarily at night on a four-year rotating basis.

### GENERAL EDUCATION REQUIREMENTS CREDITS: 15

ENG 120 <i>or</i> ENG 111	APPLIED COMMUNICATION (3/3) <i>or</i> ENGLISH COMPOSITION I (3/3)
ENG 123 <i>or</i> ENG 112	TECHNICAL COMMUNICATION (3/3) <i>or</i> ENGLISH COMPOSITION II (3/3)
MTH 110	TECHNICAL MATH I (3/4)
PLS 221 <i>or</i> PLS 222	AMERICAN GOVERNMENT & POLITICS (3/3) <i>or</i> STATE & LOCAL GOVERNMENT (3/3)
SPE 123	PUBLIC COMMUNICATION (3/3)

### CORE PROGRAM REQUIREMENTS CREDITS: 32

APP 100E	ELECTRICAL STUDIES FOR TRADES (3/4)
APP 102E	RESIDENTIAL WIRING & BLUEPRINT RDG (3/4)
APP 103E	COMMERCIAL & INDUSTRIAL WIRING (3/4)
APP 106M	INDUSTRIAL SAFETY (1/1)
APP 121M <i>or</i> MFG 120	APPRENTICE BLUEPRINT READING (3/4) <i>or</i> PRINT INTERPRETATION & PROCESSES (3/4)
APP 122 M APP 124M	MACHINE REPAIR (3/4) <sup>A</sup> APPRENTICE HYDRAULICS (3/4) <sup>A</sup>
APP 125M <i>or</i> MFG 101	APPRENTICE MACHINE SHOP (3/4) <i>or</i> MACHINING PROCESSES I (4/6)
APP 128M APP 129M APP 223M	RIGGING & WEIGHT ESTIMATING (1.5/2) <sup>A</sup> APPRENTICE PNEUMATICS (1.5/2) <sup>A</sup> PREDICTIVE & PREVENTATIVE MAINT (3/4) <sup>A</sup>
WLD 123 <i>or</i> WLD 124	SMAW WELDING PROCESSES (4/6) <i>or</i> GMAW & FCAW WELDING (4/6)

### SUGGESTED ELECTIVES CREDITS: 14

APP 111E	ELECTRIC MOTOR CONTROL (3/4)
APP 114E	PROGRAMMABLE CONTROLLERS (3/4)
APP 210M	METAL FORMING & SHEETMETAL (3/4)
APP 220M	MECHATRONIC SYST INTEGRATION & REP (3/4)
APP 290M	MILLWRIGHT INTERNSHIP (4/4)
CIS	COMPUTER INFO SYSTEMS ELECTIVE (3/4) GENERAL ELECTIVE (3/3)
MFG 102 MFG 201	MACHINING PROCESSES II (6/10) CNC I (6/10) <sup>B</sup>

### MINIMUM 61.0 CREDIT HOURS/77.0 CONTACT HOURS

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#### NOTES:

<sup>A</sup> Offered on a four-year rotating basis based upon demand

<sup>B</sup> Course can be used as Computer Elective