

**MILLWRIGHT**  
Associate in Applied Science (AAS) Degree

Minimum Credits: 61.5  
Contact Hours: 75.5

**INTRODUCTION:** 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 advance millwright certification upon successful completion to the program. The Apprentice (APP) courses for this program of study are offered primarily at night on a two-year rotating basis.

**GENERAL EDUCATION COURSES**

COURSE	TITLE	CREDITS	CONTACT HOURS
ENG 111 or ENG 120	English Composition I or Applied Communication	3.0	3.0
ENG 112 or ENG 123	English Composition II or Technical Communication	3.0	3.0
PLS 221 or PLS 222	American Government & Politics or State & Local Government	3.0	3.0
SPE 123	Public Communication	3.0	3.0
	Computer Elective	3.0	4.0
	General Elective	<u>3.0</u>	<u>3.0</u>
<b>GENERAL EDUCATION CREDITS/CONTACT HOURS:</b>		18.0	19.0

**CORE PROGRAM COURSES ( MEET WITH ACADEMIC ADVISOR TO DETERMINE CORE PROGRAM COURSES FOR CONCENTRATION AND TRANSFER )**

COURSE	TITLE	CREDITS	CONTACT HOURS
APP 100E	Electrical Studies for Trades	3.0	4.0
APP 102E	Residential Wiring & Blueprint Reading	3.0	4.0
APP 103E	Commercial & Industrial Wiring	3.0	4.0
APP 106M	Industrial Safety	0.5	0.5
APP 121M or MFG 120	Apprentice Blueprint Reading <sup>A</sup> or Print Interpretation & Processes	3.0	4.0
APP 122M	Machine Repair <sup>A</sup>	3.0	4.0
APP 124M	Apprentice Hydraulics <sup>A</sup>	3.0	4.0
APP 125M or MFG 101	Apprentice Machine Shop <sup>A</sup> or Machining Processes I	3.0-4.0	4.0-6.0
APP 128M	Rigging & Weight Estimating <sup>A</sup>	1.5	2.0
APP 129M	Apprentice Pneumatics <sup>A</sup>	1.5	2.0
APP 223M	Predictive & Preventative Maintenance <sup>A</sup>	3.0	4.0
MTH 110	Technical Math I	3.0	4.0
WLD 123 or WLD 124	SMAW Welding Processes or GMAW & FCAW Welding	<u>4.0</u>	<u>6.0</u>
<b>CORE PROGRAM CREDITS/CONTACT HOURS:</b>		34.5-35.5	46.5-48.5

**SUGGESTED ELECTIVES ( MEET WITH ACADEMIC ADVISOR TO DETERMINE ELECTIVES FOR CONCENTRATION AND TRANSFER )**

Choose a minimum of 9 Elective Credits from:

APP 111E	Electric Motor Control	3.0	4.0
APP 114E	Programmable Controllers	3.0	4.0
APP 290M	Millwright Internship	3.0	3.0
MFG 102	Machining Processes II	6.0	10.0
MFG 201	Introduction to Computer Numerical Control <sup>B</sup>	6.0	10.0
	Additional WLD or MET Courses	<u>3.0-5.0</u>	<u>4.0-8.0</u>
<b>ELECTIVE CREDITS/CONTACT HOURS:</b>		<u>9.0-17.0</u>	<u>11.0-28.0</u>
<b>TOTAL MINIMUM PROGRAM CREDITS/CONTACT HOURS:</b>		61.5-71.5	75.5-97.5

**NOTES:**

<sup>A</sup> Courses offered on a two-year rotating basis based upon demand, meet with your advisor

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