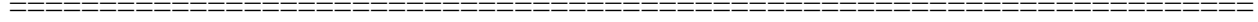


KALAMAZOO VALLEY COMMUNITY COLLEGE

**RELATED TRADE INSTRUCTION**

**Maintenance Mechanic**



<u>COURSES</u>	<u>DESCRIPTION</u>	<u>CONTACT HOURS</u>	<u>CREDIT HOURS</u>
MATH 092	BASIC TECH MATH	48	3
MATH 106	TECH MATH 1	64	4
MSM 102	BASICS OF MECH TECH	32	2
DRFT 113	ARCH BLUEPRINT READ	48	3
HVAC 114	ELEC/HVAC CONTROLS 1	48	2
HVAC 115	ELEC/HVAC CONTROLS 2	48	2
ELT 110	RESIDENT WIRE & CODE	80	3
ELT 115	COMM WIRE & CODE 1	48	3
HVAC 125	EPA RECOVERY/CERT	16	1
CNST 101	PLUMBING LEVEL 1A	64	4
CNST 108	BASIC CONSTRUCTION	64	4
ELT 215	INSTALL COMM WIRE	80	3
HVAC 120	REFRIGERATION 1	48	2
HVAC 205	HEAT CONCEPTS/SYS 1	48	2
WELD 120	INTRO TO WELDING	112	3
	<b>TOTAL HOURS</b>	<b>848</b>	<b>41</b>
<b>OPTIONAL:</b>			

Kalamazoo Valley Community College  
Apprenticeship Department

SUGGESTED SCHEDULE OF WORK EXPERIENCE  
For

<b>MAINTENANCE MECHANIC APPRENTICES</b>
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APPROXIMATE HOURS

- |  |       |
|--|-------|
| 1. SHOP PRACTICES  | _____ |
| A. Safety procedures   |       |
| B. Hand tools  |       |
| C. Shop machinery (drill press, saws, lathes, milling machines, press brake, grinders)           |       |
| D. Welding (arc, mig, tig, brazing, welding pipe, fabricating)                                   |       |
| E. Cutting-plasma, acetylene   |       |
| F. Central stores  |       |
| G. Tool room familiarization   |       |
| H. CMMS  |       |
| 2. MECHANICAL MAINTENANCE  | _____ |
| A. PM/CMMS   |       |
| B. Machine repair (FDRY hoists, braking devices, counterweights, chairs, conveyers, belts, etc.) |       |
| C. Drive systems (gears, belts, chairs, couplings, shafts, etc.)                                 |       |
| D. General Construction  |       |
| E. Bearings  |       |
| F. Electrical Motors   |       |
| 3. PNEUMATIC HYDRAULIC MAINTENANCE   | _____ |
| A. Installation/piping/bending/measurement   |       |
| B. Maintenance/repairs of pumps, valves, filters, seals, and related equipment                   |       |
| C. Troubleshooting hydraulic/pneumatic circuits  |       |
| D. Compressors/power house   |       |
| 4. FACILITY MAINTENANCE  | _____ |
| A. Rearrangement/repair & installation of equipment/rigging                                      |       |
| B. Building maintenance  |       |
| C. Miscellaneous repairs   |       |
| D. HVAC  |       |
| 5. LUBRICATION   | _____ |
| A. Types and applications  |       |
| B. Lubrication systems   |       |

## DESCRIPTION MAINTENANCE MECHANIC

Repairs and maintains, in accordance with diagrams, sketches, operation manuals, and manufacturer's specifications, machinery and mechanical equipment, such as engines, motors, pneumatic tools, conveyor systems, and production machines and equipment, using hand tools, power tools, and precision-measuring and testing instruments: Observes mechanical devices in operation and listens to their sounds to locate causes of trouble. Dismantles devices to gain access to and remove defective parts, using hoists, cranes, hand tools, and power tools. Examines form and texture of parts to detect imperfections. Inspects used parts to determine changes and dimensional requirements, using rules, calipers, micrometers, and other measuring instruments. Adjusts functional parts of devices and control instruments, using hand tools, levels, plumb bobs, and straightedges. Repairs or replaces defective parts, using hand tools and power tools. Installs special functional and structural parts in devices, using hand tools. Starts devices to test their performance. Lubricates and cleans parts. May set up and operate lathe, drill press, grinder, and other metal working tools to make and repair parts. May initiate purchase order for parts and machines. May repair electrical equipment.