

KALAMAZOO VALLEY COMMUNITY COLLEGE

RELATED TRADE INSTRUCTION

MOLDMAKER

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<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 105	BLUEPRINT READING	32	2
MACH 103	FUND OF MACH TOOL OP	128	4
MACH 105	ADV MACH TOOL OP 1	112	3
MACH 201	TOOL CONSTRUCTION	112	3
MACH 205	PLASTICS TOOL CON	112	3
MACH 220	NUM CONTROL CON	96	4
	<b>TOTAL HOURS</b>	<b>736</b>	<b>28</b>
<b>OPTIONAL:</b>			
MACH 230	COM AIDED MFG	96	4

Kalamazoo Valley Community College  
Apprenticeship Department

SUGGESTED SCHEDULE OF WORK EXPERIENCE  
For

**MOLD MAKER APPRENTICES**

APPROXIMATE HOURS

1. DRILL PRESS AND SAW	_____
2. EDM	_____
3. MILLING MACHINE	_____
4. LATHE	_____
5. GRINDING	_____
6. BENCH (LAYOUT)	_____
7. MOLD TRYOUT	_____
8. FIXTURE WORK	_____
9. MOLD REPAIR AND CONSTRUCTION	_____
10. CNC PROGRAMMING	_____
11. CNC OPERATION	_____
	Total _____

## DESCRIPTION MOLD MAKER

Lays out, machines, fits, assembles, and finishes metal parts to make and repair dies for diecasting of metal products and metal molds for injection or compression molding of plastic or glass products, analyzing specifications, and applying knowledge of die and mold design and construction: Studies blueprints of product and die or mold, and computes specifications, applying knowledge of shop mathematics and metal diecasting or plastic or glass molding processes and machinery. Plans sequence of operations, visualizing shape of die or mold in reverse of product. Measures, marks, and scribes metal stock to lay out for machining. Gives machining specifications to TOOL-MACHINE SET-UP OPERATORS or sets up and operates machines, such as horizontal boring mill, engine lathe, profile milling machine, and pantograph machine to machine outer dimensions and contoured cavity of die or mold. Grinds, files, and sands apart, using files, emery cloth, and powered grinders, to fit parts for assembly and to smooth and finish cavity. Assembles die or mold, using hand tools. Verifies dimensions, using calipers, planer gauges, and dial indicator. May repair molds.