

PATTERNMAKER (WOOD)

APPENDIX A

O*NET CODE 51-7032.00

This training outline is a minimum standard for Work Processes and Related Instruction. Changes in technology and regulations may result in the need for additional on-the-job or classroom training.

WORK PROCESSES

	Approximate Hours
A. Working in Foundry (if available)	175
1. Helping molder	
2. Helping coremaker	
B. Working in Foundry Pattern Loft (if available)	175
1. Delivering patterns to foundry	
2. Storing patterns	
3. Marking patterns	
C. Care of Tools and Equipment	500
D. Simple Flat Work	750
1. Glue joints, shellacking, finishing and selection of stock.	
2. Building, gating, down sprues and risers.	
3. Adding vents and vacuum holes to parting boards and patterns. Mounting and matching patterns.	
E. Varnishing, Sanding and Finishing Patterns	500
F. Operations of Machines	1,800
1. Rip and crosscut saws	
2. Band Saw	
3. Jointer	
4. Lathe	
5. Sander	
6. Drill Press	
7. Router	

G. Segment work, rough cut, shape, glue, and nail segments	1,000
H. Heavy Construction Patterns	1,800
I. Cylindrical Patterns	950
1. Solid straight core	
2. Split straight cores	
3. Stave work	
J. Layout and Bench Work	1,450
1. Build up	
2. Cut from solid	
3. Split	
4. Simple core work	
K. Construction of plastic and urethane patterns	200
L. Negative molds, epoxy and silicone	200
M. Construction of “no-bake” frames with locator facilities (optional)	50
N. Miscellaneous	450
1. Plaster	
2. Master Patterns	
3. Cast Gear	
Approximate Total hours	10,000

Apprenticeship work processes are applicable only to training curricula for apprentices in approved programs. Apprenticeship work processes have no impact on classification determinations under Article 8 or 9 of the Labor Law. For guidance regarding classification for purposes of Article 8 or 9 of the Labor Law, please refer to <https://dol.ny.gov/public-work-and-prevailing-wage>

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APPENDIX B

RELATED INSTRUCTION

Safety

1. First Aid – minimum 6.5 hours every 3 years
2. Sexual Harassment Prevention Training – must comply with section 201-g of the Labor Law

Fundamental Principles

1. Patternmaking
2. Coremaking
3. Foundry Practice

Patternmaking Technology

1. Materials, terms, processes of trade

Trade Science and Theory

1. Shop Sketching
2. Elementary Blueprint Reading
3. Pattern Blueprint Reading
4. Pattern Layout
5. Fundamentals of Mathematics
6. Patternmaking Mathematics and Problems
7. Chemistry of Materials
8. Metallurgy
9. Physics
10. Machine and Pattern

Industrial and Labor Relations

Other Related Courses as Necessary

144 Hours of Related Instruction are Required for Each Apprentice for Each Year.

Appendix B topics are approved by New York State Education Department.