



MDC Economic Development Corp.
USDOL Registered Apprenticeship Program

CARPENTRY APPRENTICESHIP

Work Process Schedule & Related Instruction Outline

CLASSROOM TRAINING MANUAL



REGISTERED APPRENTICESHIP PROGRAM



Appendix A

WORK PROCESS SCHEDULE

And

RELATED INSTRUCTION OUTLINE

Adopted by:

PROGRAM SPONSOR LOGO (OPTIONAL)

MDC Economic Development Corp.

8659 S. Ingleside Avenue
Chicago, IL 60619

For the Occupation of:

Carpenter

O*NET-SOC CODE: 47-2031.00 RAPIDS CODE: 0067



Appendix A

WORK PROCESS SCHEDULE

Carpenter

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This schedule is attached to and a part of these Standards for the above identified occupation.

1. APPRENTICESHIP APPROACH

☒ Time-based

☐ Competency-based

☐ Hybrid

2. TERM OF APPRENTICESHIP

The term of this occupation shall encompass the successful attainment of **8000** On-the-Job Learning (OJL) hours and sufficient demonstration of all the OJL competencies listed in the Work Process Schedule, plus successful completion of a minimum of **787.5** hours of supplementary Related Technical Instruction (RTI) coursework.

3. RATIO OF APPRENTICES TO JOURNEYWORKERS

The Apprentice-to-Journeyworker Ratio is **01** Apprentice(s) to **01** Journeyworker(s).

Adequate or proper supervision of the apprentice means the apprentice is always under the supervision of a fully qualified journeyworker or supervisor, who is responsible for making work assignments, providing OJL, and ensuring safety at the worksite.

Proper supervision of an apprentice does not mean the apprentice must be within eyesight or reach of the supervisor, but that the supervisor knows what the apprentice is working on; is readily available to the apprentice; and is making sure the apprentice has the necessary instruction and guidance to perform tasks safely, correctly, and efficiently.

4. APPRENTICE WAGE SCHEDULE

Under this Registered Apprenticeship, apprentices shall be paid a progressively increasing schedule of wages based on an established **Starting Wage** of **\$27.00/ hour** and a **Journeyworker Wage** (the wage an apprentice can expect to receive upon successful completion of their apprenticeship) of **\$54.00/hour**. These are minimum established hourly wages for this apprenticeship; if choosing to do so, an employer may always pay a higher wage.



Apprentice Wage Schedule		
Period/Term	Approximate OJL Hours	Hourly Wage
1	0 – 1000	\$27.00
2	1000 – 2000	\$32.00
3	2000 – 3000	\$37.80
4	3000 – 4000	\$40.50
5	4000 – 5000	\$43.20
6	5000 – 6000	\$45.90
7	6000 – 7000	\$48.60
8	7000 – 8000	\$54.00
Journeyworker Wage (expected <u>minimum</u> hourly wage upon completion of apprenticeship): \$54.00		

5. PROBATIONARY PERIOD

Every selected apprentice will serve a probationary period comprising the first **90(days) days/months/OJL hours** of this apprenticeship.

6. SELECTION PROCEDURES

MDC Economic Development Corp., as the Registered Apprenticeship Program Sponsor, will adhere to established non-discriminatory and Equal Employment Opportunity (EEO) policies and practices when recruiting and selecting apprentices, as well as administer the apprentice selection process in a fair and consistent manner.

- A. Every person requesting an application will have one made available.
- B. All applications will be identical in form and requirements.
- C. All applicants will be evaluated in the same manner, using identical, non-discriminatory criteria and processes.
- D. As part of the application process, all apprentice applicants may be required to provide supporting documents (driver's license; birth certificate - or other acceptable proof of age, etc.).



- E. Completed applications will be checked for minimum qualifications. Applicants deficient in one or more qualifications or requirements or making false statements on their applications will be notified in writing of their disqualification and of the appeal rights available to them. No further processing of such applications will be taken.
- F. As applicable, applicants who meet the minimum qualifications established for the apprenticeship program and submit all required documents will be notified where and when to appear for an interview.
- G. The Program Sponsor will ensure the interview process is identical for all apprentice candidates.
- H. The Program Sponsor will ensure that applicants selected for the program review the applicable Registered Apprenticeship Program Standards, prior to the start of the apprenticeship.



Appendix A

WORK PROCESS SCHEDULE

Carpenter

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Description:

The following work processes (i.e., professional competencies) are intended as a guide. It is understood that the scope of work and the application of learned skills may vary. Additional skills may be required, and the Sponsor may modify the work processes to meet employer needs.

WORK PROCESS SCHEDULE				
On-the-Job Learning (OJL) Competencies	OJL Hours	Trainer Initials	Apprentice Initials	Date Completed
1. Safety: Hand and Power Tools				
Inspect and safely use hand tools	200			
Inspect and safely use power tools				
2. Safety: Equipment, Material handling				
Don personal fall arrest system	200			
Inspect power cords and check for GFCIs				
Inspect and don eye/hearing protection, hard hat, gloves				
Demonstrate safe lifting procedures				
3. Orientation to the trade				
Demonstrate proper use of square	50			
Demonstrate proper use of level	50			



On-the-Job Learning (OJL) Competencies	OJL Hours	Trainer Initials	Apprentice Initials	Date Completed
4. Print reading				
Read and interpret drawings: foundation, floor, elevation	500			
5. Hardware				
Install locksets	100			
6. Construction drawings I				
Layout and consult a floor assembly	1500			
Layout and construct a frame wall				
Layout and construct ceiling joists, rafters and sheeting				
7. Building envelope systems				
Install siding with proper lap	1000			
Install blanket insulation, vapor barrier				
Install composition shingles, ridge cap, cricket				
Install gypsum drywall on wall and ceiling				
Install suspended ceiling system				
8. Construction drawings II				
Prepare rough opening for a window/door	400			
Estimate material for a wood frame wall/steel frame wall				
Layout a steel stud wall				
Read and interpret a set of commercial drawings				



On-the-Job Learning (OJL) Competencies	OJL Hours	Trainer Initials	Apprentice Initials	Date Completed
9. Site layout I				
Erect, plumb and brace a wall form	500			
Erect, plumb and brace a column form				
Erect, plumb and brace a deck form				
10. Commercial drawings				
Prepare eave for metal roofing	500			
Install metal panels for a lap seam roof				
Install end-lapped standing seam panels				
11. Stair layout I				
Install open and closed stairway risers and treads	500			
Install a return nosing				
Install a post-to-post balustrade system				
12. Welding				
Cut metal with an oxyfuel system	500			
Weld metal pieces together with an arc welder				
13. Site layout II				
Identify, select, and care for site layout tools	2000			
Set up, adjust, and field test leveling instruments				
Develop an estimate for a given job				
Develop and present a look ahead schedule				
Total On-the-Job Learning (OJL) Hours:	8000			



Appendix A

RELATED TECHNICAL INSTRUCTION (RTI) OUTLINE

Carpenter

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Related Technical Instruction (RTI) supplements On-the-Job Learning (OJL) training and contains courses that provide theoretical and technical training related to the occupation. It is through a combination of both OJL and RTI that an apprentice can become fully skilled in the occupation.

At least 144 hours of supplementary RTI is recommended per year. RTI may also include safety courses, organization-specific employee orientation and information sessions, and professional development training. The RTI hours provided denote estimated classroom contact hours.

Training Provider: Choice Construction Services

**112 Meadow Oaks Lane
Jackson, MS 39209
Lee Halverson
847-483-4056**

Related Instruction Provided: ☐ During Work Hours ☐ During Non-Work Hours ☒ Both

As a key part of apprentice orientation, all apprentices, RI instructors and OJL mentors will complete Anti-Harassment Training, in accordance with CFR 29, Part 30. Guidance and training resources can be found online at:

<https://www.apprenticeship.gov/eeo/sponsors/prevent-harassment>

In addition to available technical assistance from OA staff, anti-harassment and non-discrimination resources are available at <https://www.apprenticeship.gov/eeo>. The website houses a robust suite of resources to inform apprentices, sponsors, and partners about the EEO regulation requirements, and have developed materials for public use to support training and implementation. This includes forms, webinars, and FAQs.

Included among these materials is a new webcast, [Understanding EEO Requirements on Anti-Harassment and Complaints for Registered Apprenticeship Programs \(RAPs\)](#). This 30-minute training helps users: define and recognize unlawful harassment; identify ways to ensure RAPs are free from harassment; and implement complaints procedures.



Appendix A

RELATED TECHNICAL INSTRUCTION (RTI) OUTLINE

Carpenter- Year 1

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RELATED TECHNICAL INSTRUCTION (RTI) CURRICULUM	Classroom Hours
A. Core Curriculum: Safety, hand and power tools, math, prints, rigging, mtl handling.	72.5 hrs.
B. Orientation to the trade	2.5 hrs.
C. Building Materials, Fastener and Adhesives	20.0 hrs.
D. Hand and Power tools.	10.0 hrs.
E. Introduction to Construction Drawings, Specifications and Layout	22.5 hrs.
F. Floor Systems	25.0 hrs.
G. Wall Systems	10.0 hrs.
H. Ceiling Joist and Roof Framing	47.5 hrs.
I. Introduction to Building Envelope Systems	12.5 hrs.
J. Basic Stair Layout	12.5 hrs.
<i>Year 1-Total Minimum Related Technical Instruction (RTI) Hours:</i>	<i>235 hrs.</i>
<i>Total Minimum Related Technical Instruction (RTI) Hours:</i>	<i>787.5 hrs.</i>



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RELATED TECHNICAL INSTRUCTION (RTI) OUTLINE

Carpenter- Year 2

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RELATED TECHNICAL INSTRUCTION (RTI) CURRICULUM	Classroom Hours
A. Commercial Drawings	25.0 hrs.
B. Cold Formed Steel Framing	15.0 hrs.
C. Exterior Finishing (Elective)	35.0 hrs.
D. Thermal and Moisture Protection	7.5 hrs.
E. Roofing Applications	25.0 hrs.
F. Doors & Door Hardware	20.0 hrs.
G. Drywall Installation	15.0 hrs.
H. Drywall Finishing	17.5 hrs.
I. Suspended ceilings	15.0 hrs.
J. Window, Door, Floor and Ceiling Trim	25.0 hrs.
K. Cabinet Installation	10.0 hrs.
<i>Year 2-Total Minimum Related Technical Instruction (RTI) Hours:</i>	<i>210 hrs.</i>
<i>Total Minimum Related Technical Instruction (RTI) Hours:</i>	<i>787.5 hrs.</i>



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RELATED TECHNICAL INSTRUCTION (RTI) OUTLINE

Carpenter- Year 3

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RELATED TECHNICAL INSTRUCTION (RTI) CURRICULUM	Classroom Hours
A. Properties of Concrete	10.0 hrs.
B. Rigging Equipment	10.0 hrs.
C. Rigging Practices	15.0 hrs.
D. Trenching and Excavating	15.0 hrs.
E. Reinforcing Concrete	15.0 hrs.
F. Foundations and Slabs-on-Grade	20.0 hrs.
G. Vertical Formwork	15.0 hrs.
H. Horizontal Formwork	15.0 hrs.
I. Handling and Placing Concrete	20.0 hrs.
J. Tilt-Up Wall Systems	17.5 hrs.
<i>Year 3-Total Minimum Related Technical Instruction (RTI) Hours:</i>	<i>160 hrs.</i>
<i>Total Minimum Related Technical Instruction (RTI) Hours:</i>	<i>787.5 hrs.</i>



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RELATED TECHNICAL INSTRUCTION (RTI) OUTLINE

Carpenter- Year 4

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RELATED TECHNICAL INSTRUCTION (RTI) CURRICULUM	Classroom Hours
A. Site Layout 1: Differential Leveling	20.0 hrs.
B. Site layout 2: Angular and Distance Measurement	37.5 hrs.
C. Advanced Roof Systems	20.0 hrs.
D. Advanced Wall Systems	25.0 hrs.
E. Advanced Stair Systems	25.0 hrs.
F. Introduction to Construction Equipment	7.5 hrs.
G. Introduction to Oxyfuel Cutting and Arc Welding	20.0 hrs.
H. Site Preparation	7.5 hrs.
I. Fundamentals of Crew Leadership	20.0 hrs.
<i>Year 4-Total Minimum Related Technical Instruction (RTI) Hours:</i>	<i>182.5 hrs.</i>
<i>Total Minimum Related Technical Instruction (RTI) Hours:</i>	<i>787.5 hrs.</i>