

Attachment 2A: On-the-Job Learning and Education Outline Repairman

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Section 1 – On-the-Job Learning

[29 CFR 29.5(b)(2)]

1. During the Apprenticeship, the Apprentice shall receive work experience and job related education in all phases of the occupation, including safe work practices, necessary to develop the skill and proficiency of a skilled professional.
2. The program sponsor or its designated apprenticeship committee must ensure Apprentices are rotated throughout the various work processes to ensure a well-rounded professional upon completion of the Apprenticeship, and identify what methodology will be used to track progression of experience on-the-job.
3. Such on-the-job training shall be carried on under the direction and guidance of a qualified professional.

The following identifies the major work processes in which Apprentices will be trained.

Work Process Category	Approx. Hours	Or Demonstrated Competency:	
1. Plant Safety	100	Supervisor's Initials:	Date:
2. Quality	60	Supervisor's Initials:	Date:
3. Metal Basics	200	Supervisor's Initials:	Date:
4. Electrical Basics	400	Supervisor's Initials:	Date:
5. Welding (Tig/Mig/Stick)	350	Supervisor's Initials:	Date:
6. Lathe Manual	200	Supervisor's Initials:	Date:
7. Milling (Manual)	340	Supervisor's Initials:	Date:
8. Fitting	200	Supervisor's Initials:	Date:
9. Hydraulics	250	Supervisor's Initials:	Date:
10. Grinding	200	Supervisor's Initials:	Date:
11. EDM	300	Supervisor's Initials:	Date:
12. Dies/Jigs/Fixtures	400	Supervisor's Initials:	Date:
13. Preventive Maintenance	650	Supervisor's Initials:	Date:

14. CAD/CAM	200	Supervisor's Initials:	Date:
15. CNC Milling	500	Supervisor's Initials:	Date:
16. Machine Maintenance	250	Supervisor's Initials:	Date:
17. Troubleshooting	1100	Supervisor's Initials:	Date:
18. Hot Runner Basics	300	Supervisor's Initials:	Date:
19. Process Planning	150	Supervisor's Initials:	Date:
20. Spotting	900	Supervisor's Initials:	Date:
21. Polishing	600	Supervisor's Initials:	Date:
Total Hours:	7650		

Section 2 – Apprenticeship Instructor Qualifications

[29 CFR 29.5(b)(4 (i) (ii))]

Every Apprenticeship Instructor shall:

- (1) Meet the State Dept. of Education’s requirements for a vocational technical instructor in the State of Registration.
- OR
- (2) Be a subject matter expert which is defined as an individual who is recognized within an industry as having expertise in a specific occupation. AND
- (3) Have training in teaching techniques and adult learning styles, which may occur before or after the apprenticeship instructor has started to provide the Job Related Education (JRE).

Section 3 – Job Related Education

[29 CFR 29.5(b)(4)]

Provider(s): Tri County Technical College/Spartanburg Community College/Expert Tech

Method: Classroom, Labs, On-line, and Vendor Demonstration

- 1. During the term of apprenticeship, each Apprentice is required to complete approximately 144 hours of related education for each year of the Apprenticeship.
- 2. Each Apprentice’s attendance and progress in related education must be tracked and appropriate records maintained.
- 3. Courses may be taken during or outside the regular working hours. All time spent in such classes after regular working hours shall not be considered as hours of work. If required to attend classes or work through on-line courses, the apprentices shall be compensated at their regular hourly rate.
- 4. Time devoted to the job related education shall not be considered as part of the on-the-job learning (OJL).
- 5. Failure on the part of the Apprentice to fulfill their obligation as to the related education and/or attendance, or their failure to maintain passing grades therein, shall constitute adequate cause for cancellation of their Apprenticeship Agreement.

The course listings outline the related education that supplements the on-the-job learning. It is through the combination of both the on-the-job learning and the related education that the apprentice can reach the skilled level of the occupation. The following is the required course curriculum during the term of apprenticeship.

Job Related Education Topic	Hours	Provider		
		UTM	Technical College	Expert Tech
Molds 100	40			X
Industrial Safety	10	X		
Machine Tool Math	40		X	
Reading/ Precision Measurement	30		X	
Machining Fundamentals I	32		X	
Quality Systems & Inspection	16	X		
Manufacturing Processes & Planning	20		X	
Metallurgy Fundamentals	40		X	

Maintenance	60		X	
Machining Fundamentals II	32		X	
Jig & Fixture Design	40		X	
Hot Runner Basics	20	X		
Basic Electrical	40		X	
Basic Welding	40	X	X	
Intro Spotting/Polishing	20	X		
Hydraulic Systems	20		X	
Intro To CNC	32		X	
Intro to PC	10	X		
Preventive Maintenance	20	X		
Troubleshooting	20	X		
Spotting	40	X		
Polishing	60	X		
Total Hours:	682	256	386	40