

A Primer for “Growing Your Own”



Plastics Pioneers Association

Fall Meeting, September 2019

Dan Reinecke- Service Supervisor



Profit From Our Experience



A Brief Overview

- BEKUM was founded in 1958 in Berlin, Germany
- BEKUM USA established in 1979
- 115,000 sq. ft. facility
- 134 employees with minimal turn-over
- Martin Stark establishes the Apprenticeship Program at BEKUM America in 1995



BEKUM'S Machine Lines



We manufacture a complete line of BEKUM machines in-house ranging from the H-111S through the HYBLOW machine series all the way to the BA-440 for multiple industries: Ag Chem, Automotive, Food & Beverage, Household Products, Industrial Packaging, Lubricants, etc.



“H” Series



**“BM/HYBLOW
/EBLOW”
Series**



“BA” Series

A Primer for “Growing Your Own”



Profit From Our Experience

A Solution to Skilled Labor Shortage



With only one skilled tradesman entering the workforce for every five who retire, the demand for skilled labor in the U.S. has reached a critical mass.

- The economy has “bumped against the proverbial labor wall”*
- With most of the baby boomers already set to retire with few years left to work, we are lacking trained people to fill these positions.
- Manufacturers MUST actively recruit and train the new generation to improve the amount of skilled workers available.

*David Rosenberg, chief economist and strategist at Gluskin Sheff

A Solution to Skilled Labor Shortage



Apprenticeships are the answer!

- Apprenticeship programs are the ONLY formal, nationally recognized occupational education and training programs that combine both classroom instruction and worksite training.
 - Today in America, fewer than 5 percent of young people train as apprentices. In Germany, the number is closer to 60 percent—in many diverse fields.



Apprenticeships

- History of Apprenticeships
- Apprentice Program Structure
- Apprenticeship Standards
- Type of Programs
- Program Specifics
- Required Inputs From the Employer
- Bekum Apprentice Program
- Implementation
- Employer Advantages and Disadvantages



Apprenticeships

- ***History of Apprenticeships***

History of Apprenticeships



Since the beginning of time people have passed skills from one generation to another.

The prestige of being craft workers meant they became an important member of society.



“Open the door! “I will not open it.
“Wherefore not? “The knife is in the
meat, and the drink is in the horn,
and there is revelry in Arthur’s Hall;
and none may enter therein but the
son of a King of a privileged country,
or a craftsman bringing his craft.”



**-Red Book of Hergest, a 14th-century Welsh Bardic manuscript*

Profit From Our Experience

History of Apprenticeships



As industry has changed so has the apprentice process.

- Most of the apprentices were 14 years of age or younger. By comparison, today most apprentices begin training between the ages of 18 and 24.
- The modern apprenticeship agreement is signed by the employer; by a representative of a joint management-labor apprenticeship committee (or both); and by the apprentice. If the apprentice is a minor, the parent or guardian also signs.



History of Apprenticeships

- It wasn't until the late 19th century that programs have become comparable to what they are today.
- The new era apprentice programs started and were developed in the most marketable industries, iron foundries, ship yards, electrical and mechanical equipment plants.
- In 1937, the United States enacted the National Apprenticeship Act, which authorized the Department of Labor (DOL) to register and oversee apprentice programs that meet Federal standards and issue certificates of completion.



Apprenticeships

- History of Apprenticeships
- ***Apprentice Program Structure***



Apprentice Program Structure

- Apprentice programs offer employment and a combination of on-the-job training and related technical and theoretical instruction through a training provider.
 - AKA **"DUAL TRAINING"**
- The duration of training, and the skills and competencies required for mastery, are driven by each industry.





Apprentice Program Structure

- "Dual training" captures the idea at the heart of every apprenticeship: Trainees split their days between classroom instruction at a vocational school and on-the-job time at a company.
- The theory they learn in class is reinforced by the practice at work.
- They also learn work habits and responsibility and, if all goes well, absorb the culture of the company.
- Certifications earned through Registered Apprenticeship programs are recognized nationwide as portable industry credentials.



Apprenticeships

- History
- Apprentice Program Structure
- ***Apprenticeship Standards***



Apprenticeship Standards

Programs registered by the United States Department of Labor (US DOL) must provide that:

- The starting age of an apprentice is not less than 16 years of age
- There is full and fair opportunity to apply for apprenticeship
- There is a schedule of work processes in which an apprentice is to receive training and experience on the job
- The program includes organized instruction designed to provide apprentices with knowledge and technical subjects related to their trade (a minimum of 144 hours per year is normally considered necessary)

Apprenticeship Standards



**Programs
registered by
the United
States
Department of
Labor (US DOL)
must provide
that:**

- There is a progressively increasing schedule of wages
- Proper supervision of on-the-job training with adequate facilities to train apprentices
- An apprentice's progress, both in job performance and related instruction, is evaluated periodically and appropriate records are maintained
- There is employee-employer cooperation
- Successful completion is recognized
- There is no discrimination in any phase of selection, employment, or training



Apprenticeships

- History
- Apprentice Program Structure
- Apprenticeship Standards
- ***Type of Programs***



Type of Programs

- Nationwide, there are registered apprenticeship programs for over 1000 occupations and that number continually grows.
- Services Industry Apprenticeships
 - Apprentices may train to become barbers or cosmetologists, cooks or chefs, correctional officers.
- Industrial Apprenticeships
 - Industrial and manufacturing apprentices are employed in the automobile, paper, farming, technology and other industries to help create the products people use in their daily lives.
- Construction Apprenticeships
 - Specifically renovation, construction or maintenance of buildings and roads.



Type of Programs

The Office of Apprenticeship provides a list of the officially recognized apprenticeable occupations

<https://www.apprenticeship.gov/apprenticeship-industries>



Apprenticeships

- History
- Apprentice Program Structure
- Apprenticeship Standards
- Type of Programs
- ***Program Specifics***



Program Specifics

- Each program has its own work process schedule that has to be approved by the US Department of Labor (US DOL) before an apprentice can be registered.

**Description:**

Operate, test, and maintain unmanned, automated, servo-mechanical, electro-hydraulic, electro-pneumatic or electro-mechanical equipment. May assist engineers in building and testing.

On-The-Job Training:

Apprentices will receive training in the various work experiences listed below. The order in which this training is given will be determined by the flow of work on the job and will not necessarily be in the order listed. The times allotted to these various processes are the estimated times which the average apprentice will require to learn each phase of the trade. They are intended only as a guide to indicate the quality of the training being provided and the ability of the apprentice to absorb this training in an average amount of time. The total term of apprenticeship is indicated below.

Approximate Hours

A. Read blueprints, schematics, diagrams, and technical orders to determine methods and sequences of assembly.....	1000
B. Install electrical and electronic parts and hardware in housings or assemblies, using soldering equipment and hand tools.....	1500
C. Align, fit, and assemble component parts, using hand tools, power tools, fixtures and templates.....	1000
D. Analyze and record test results, and prepare written testing documentation.....	500
E. Operate power equipment and material handling equipment (forklifts, cranes, etc.).....	80
F. Verify dimensions and clearances of parts to ensure conformance to specifications, using precision measuring instruments.....	200
G. Build or manufacture to drawing, bill of material, all items to established production quality and quantity as scheduled.....	2200
H. Repair, rework, and troubleshoot electro-hydraulic and electro-pneumatic assemblies and systems to meet operational specifications.....	160
I. Test performance of electromechanical assemblies, using test instruments such as electronic meter and oscilloscope.....	200
J. Build, test, and operate new machines.....	1000
K. Train others to install, use, and maintain machines.....	80
L. Assist customers/vendors with phone or site consultation when necessary.....	80
Total Hours.....	8,000



NAME:		Industrial Electromechanical Tech.			
ORACLE #:		MINIMUM HOURS:	880		
COMPANY: Bekum America		START DATE:			
LAST REGISTERED:		STATUS:			
CODE	COURSE NAME	**PREREQUISITE	FINAL GRADE	CREDIT HOURS	HOURS
REQUIRED COURSES					
ELTE 102	Industrial/Construction Safety	R3 and W2		2.00	48
ELTE 110	Practical Electricity	(ELTE 102 or concurrently) & R3, W2 and M3		3.00	96
ELTE 111	Introduction to Industrial Automation	R3		4.00	96
ELTE 121	Electrical Mathematics	ELTE 110 and (MATH 114 or M5) & R5		5.00	96
ELTE 122	Industrial Control Electronics	ELTE 111 & ELTE 121		5.00	112
ELTE 123	Motors and Transformers	ELTE 121		5.00	112
ELTE 131	Introduction to Machine Controls	ELTE 110		4.00	80
ELTE 150	Electric Motor Maintenance	ELTE 110		2.00	48
ELTE 232	Industrial Control Design	ELTE 131		4.00	96
ELTE 260	Intro to Programmable Controllers	ELTE 131		4.00	96
REQUIRED COURSES TOTAL				38	880
ELECTIVES (minimum of two electives)					
ELTE 112	Basic Wiring Installation	ELTE 110		2.00	48
ELTE 141	National Electrical Code I	ELTE 110		4.00	64
ELTE 145	Electrical Prints for Building	ELTE 141		4.00	80
ELTE 261	Allen Bradley PLC-5 Advanced	ELTE 260		6.00	128
METM 110	Introduction to Precision Machining	(METD 100 or METD 150 or Drafting Test) & R3, W4 & M4		4.00	96
METS 130	Industrial Hydraulics	ELTE 102 & R4, W4 & M4		4.00	96
ELECTIVE COURSES TOTAL				24	512
				TOTAL HOURS	1392
PREREQUISITE COURSES (# needed)					
MATH 050	Pre-Algebra	R3, W2, M3		4.00	64
MATH 114	Technical Math I	R4 & (MATH050 or M4)		4.00	64
METD 100	Basic Mechanical Drafting	None		3.00	48
METD 105	PC Applications for Technology	None		3.00	64

** R = Reading Level, W = Writing Level and M = Math Level

1st Year

- ELTE 102
- ELTE 110
- ELTE 131

2nd Year

- ELTE 111
- ELTE 121
- ELTE 150 (F, Sp)

3rd Year

- ELTE 122 (Sp)
- ELTE 232 (F)
- ELTE 260 (F)

4th Year

- ELTE 123 (F)
- ELECTIVE
- ELECTIVE



Apprenticeships

- History
- Apprentice Program Structure
- Apprenticeship Standards
- Type of Programs
- Program Specifics
- ***Required Inputs From the Employer***

Required Inputs From the Employer



Time

4 years for each apprentice
(8000 work hours minimum)

Advertising and interviewing potential candidates

Funding \$X/yr. per apprentice,
*\$32,990/yr. average over 4 years

Schooling

- Classes
- Registration
- Books

On the job training

- Training Time
- Wages for a skilled laborer and the apprentice

Tools

- Beginning set of basic tools needed to do the job (not required)

Additional Resources

Staffing needs (committee-Senior staff, supervisors, co-workers)

Additional training for your current employees
(Train the Trainers)



Apprenticeships

- History
- Apprentice Program Structure
- Apprenticeship Standards
- Type of Programs
- Program Specifics
- Required Inputs From the Employer
- ***Bekum Apprentice Program***



Bekum Apprentice Program

Why did Bekum begin an apprentice training program?

- Back in 1995, Martin Stark with Bekum decided to start an apprentice program to offset the imbalance of an aging workforce and a lack of local quality skilled manufacturing tradesmen.

To get the best skilled individuals for BEKUM's required trades, we must ***"GROW OUR OWN."***

- This gave us an opportunity to fill positions with limited skilled individuals and train them about **BEKUM'S** products and procedures, while giving the apprentices the opportunity to grow and become proficient in their chosen technical field.

Bekum Apprentice Program



- The focus is to recruit High School juniors and seniors interested in manufacturing skilled trades.
- This program is registered with the US Department of Labor (US DOL), and upon successful completion, a journeymen's certificate is issued.



Bekum Apprentice Program

- The main course of study are:
 - Electrical
 - Mechanical Assembly
 - Machinist
 - Fabricator
 - Mechatronics
- BEKUM has graduated 21 journeymen since 2000, 15 who are still employed
- BEKUM currently has 17 registered apprentices
- 24 percent of BEKUM'S manufacturing workforce are graduate and current apprentices
- In 2019 Bekum America built a dedicated training center for its apprentices:

[Bekum Apprentice Training Center](#)



Bekum Apprentice Training



- 1350 sq. ft. dedicated department
- Full time Journeyman instructor
- 4 dedicated machine tools with full QC capabilities
- Integrated A/V classroom





Bekum Apprentice Program

The program is based on a **structured 8000 hours on-the-job training**, working closely with experienced journeymen.

While attending Lansing Community College in the evening, approximately **60 credits (576 credit hours) are to be earned over 4-years**.

During the apprenticeship program, **weekly reports** are to be written regarding projects/work **accomplished**, what was **learned**, and how the apprentice was **challenged**.



Bekum Apprentice Program

A **committee review** happens **monthly** with the apprentice . Questions and/or concerns are addressed with the apprentice. This is also the time to review the college schedule and how classes are progressing.

Apprentices receive a **formal review @ every 1000 hour milestone;** increased compensation is based on satisfactory progression.

A required 3.0 or greater GPA per class MUST be maintained.

Apprentices who fall below the mark or are not progressing are penalized.

BEKUM AMERICA CORPORATION ELECTRICAL APPRENTICE HOURS RECORD

NAME: Elijah Raney

CLOCK #: 1803

Submitted for the month of: August

Year: 2012

Day/Date	Cable Building	Panel Building	Machine Construction & Wiring	Machine Start-up and Checkout	Assembly	Shop Electrical Maintenance	Crib Time	Service Trip	Misc.	Fabrication & Tool room
1		8	2							
2		8								
3		8								
4										
5										
6		8								
7		3	5							
8		8								
9		8								
10		8								
11										
12										
13		8								
14		8								
15		8								
16		8								
17		8								
18										
19										
20		8								
21		5							3	
22		5							5	
23		2.5							7.5	
24		8								
25		6								
26										
27		8								
28		10								
29		8								
30		8								
31		8								
Month Total	0	173.5	7	0	0	0	0	0	15.5	0
Prev. Total	0	113	35	12	0	24	0	0	0	0
Grand Total	0	286.5	42	12	0	24	0	0	15.5	0
Required Hrs	1000	2000	3200	1000	220	40	40	80	100	320
Grand Total Hours:	380									

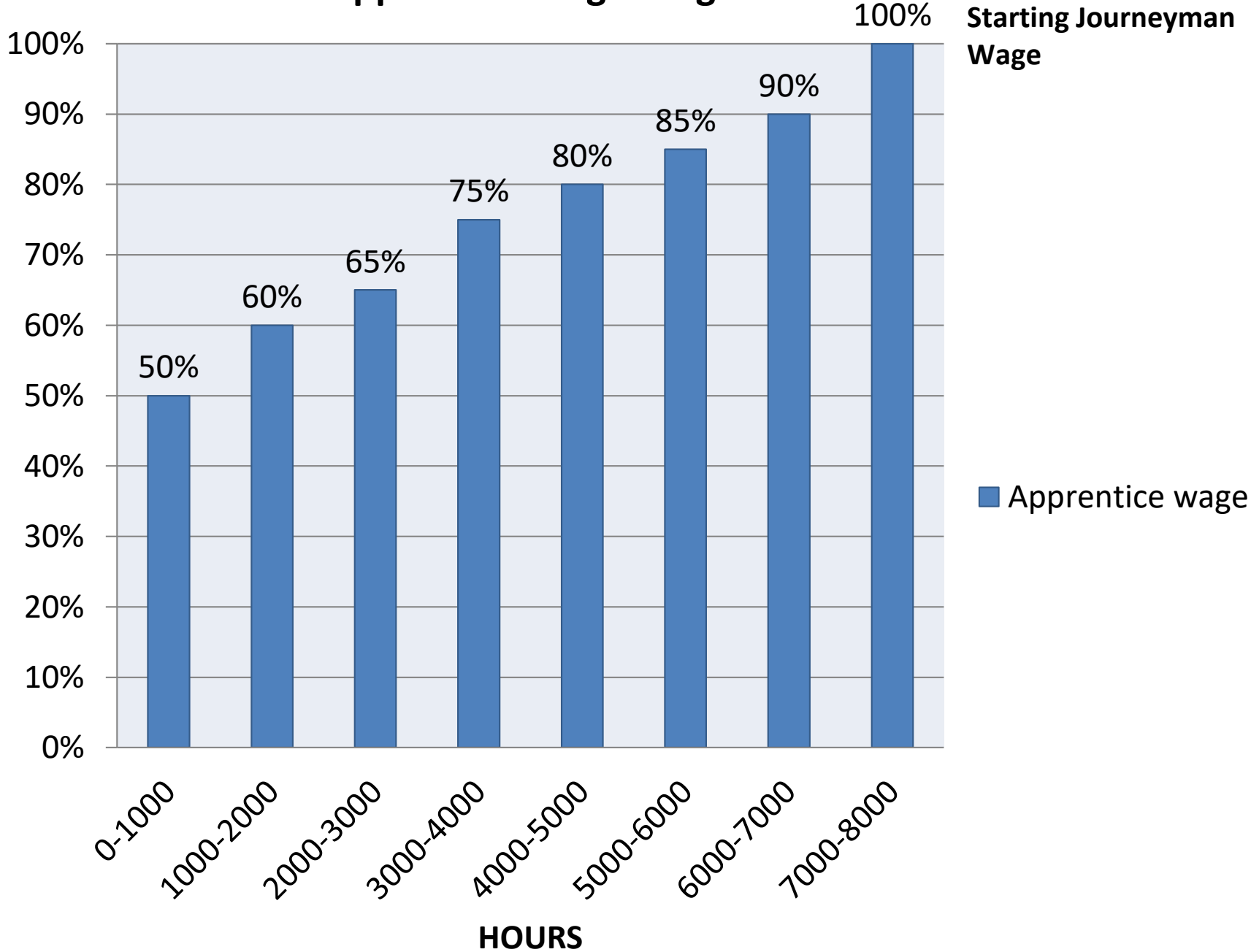
I certify that this is true and correct to the best of my knowledge:

Employee

Supervisor

Apprentice Wage Progression

Starting Journeyman Wage





Appendix A

Minimum Industrial Electrician Apprentice Tools (To be supplied by Apprentice*)

5 Drawer Roll-Away Chest
Fluke Multi-meter
9" Torpedo Level
40-Watt Soldering Iron
½" Capacity Pneumatic Drill
3/8" Capacity Pneumatic Drill
Wire Stripper
Hacksaw
SAE Combination Wrench Set
Metric Combination Wrench set
T-Handle Tap Wrench Set
Screwdriver Set
Metric / SAE Socket Set
4 piece Adjustable Wrench Set
28 piece Transfer Punch Set
12" Combination Square
Panduit Terminal Crimp Tool
Ratchet Wire Crimper
Cable Cutter
Terminal screwdriver
Allen wrenches Metric/ SAE
Dead blow hammer

Ty-Wrap Gun
Ball Peen Hammer
7 pc. Pliers set
Rivet Gun
6" Scale
Tapemeasure
Flashlight
Pipe wrench set
Utility knife
Fuse puller
Fish tape
Blowgun
Tool belt
Drill index metric
Punch and chisel set
Deburring tool
T-handle wrenches Metric/ SAE

Employee Signature

Date

*The Employer may furnish all, or a portion of the above, for the Apprentice. In the event the Employer supplies the Apprentice with such tools, the tools shall remain the property of the Employer.

Profit From Our Experience



NAME:		TRADE: Industrial Electromechanical Tech.			
ORACLE #:		MINIMUM HOURS:		880	
COMPANY: Bekum America		START DATE:			
LAST REGISTERED:		STATUS:			
CODE	COURSE NAME	**PREREQUISITE	FINAL GRADE	CREDIT HOURS	HOURS
REQUIRED COURSES					
ELTE 102	Industrial/Construction Safety	R3 and W2		2.00	48
ELTE 110	Practical Electricity	(ELTE 102 or concurrently) & R3, W2 and M3		3.00	96
ELTE 111	Introduction to Industrial Automation	R3		4.00	96
ELTE 121	Electrical Mathematics	ELTE 110 and (MATH 114 or M5) & R5		5.00	96
ELTE 122	Industrial Control Electronics	ELTE 111 & ELTE 121		5.00	112
ELTE 123	Motors and Transformers	ELTE 121		5.00	112
ELTE 131	Introduction to Machine Controls	ELTE 110		4.00	80
ELTE 150	Electric Motor Maintenance	ELTE 110		2.00	48
ELTE 232	Industrial Control Design	ELTE 131		4.00	96
ELTE 260	Intro to Programmable Controllers	ELTE 131		4.00	96
REQUIRED COURSES TOTAL				38	880
ELECTIVES (minimum of two electives)					
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METM 110	Introduction to Precision Machining	(METD 100 or METD 150 or Drafting Test) & R3, W4 & M4		4.00	96
METS 130	Industrial Hydraulics	ELTE 102 & R4, W4 & M4		4.00	96
ELECTIVE COURSES TOTAL				24	512
TOTAL HOURS				62	1392
PREREQUISITE COURSES (if needed)					
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MATH 114	Technical Math I	R4 & (MATH050 or M4)		4.00	64
METD 100	Basic Mechanical Drafting	None		3.00	48
METD 105	PC Applications for Technology	None		3.00	64

** R = Reading Level, W = Writing Level and M = Math Level

1st Year

- ELTE 102
- ELTE 110
- ELTE 131

2nd Year

- ELTE 111
- ELTE 121
- ELTE 150 (F, Sp)

3rd Year

- ELTE 122 (Sp)
- ELTE 232 (F)
- ELTE 260 (F)

4th Year

- ELTE 123 (F)
- ELECTIVE
- ELECTIVE



Apprenticeships

- History
- Apprentice Program Structure
- Apprenticeship Standards
- Type of Programs
- Program Specifics
- Required Inputs From the Employer
- Bekum Apprentice Program
- ***Implementation***



Implementation



Create a committee to take responsibility for the project and manage the program. This can often be headed by the HR department.



Determine which trade/craft/field is available for applicants in your corporation.



Contact the US Department of Labor (US DOL) Office of Apprenticeship for available occupations and requirements for training.

- <https://www.apprenticeship.gov/employers/create-program>

Implementation

Create a Work Process Schedule (WPS) including job description, tasks, and required hours of training.

Occupational Title: Industrial Electromechanical Technician

O*NET Code:

RAPIDS Code:

Description:

Operate, test, and maintain unmanned, automated, servo-mechanical, electro-hydraulic, electro-pneumatic or electro-mechanical equipment. May assist engineers in building and testing.

On-The-Job Training:

Apprentices will receive training in the various work experiences listed below. The order in which this training is given will be determined by the flow of work on the job and will not necessarily be in the order listed. The times allotted to these various processes are the estimated times which the average apprentice will require to learn each phase of the trade. They are intended only as a guide to indicate the quality of the training being provided and the ability of the apprentice to absorb this training in an average amount of time. The total term of apprenticeship is indicated below.

Approximate Hours

- A. Read blueprints, schematics, diagrams, and technical orders to determine methods and sequences of assembly.....1000
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- C. Align, fit, and assemble component parts, using hand tools, power tools, fixtures and templates.....1000
- D. Analyze and record test results, and prepare written testing documentation.....500
- E. Operate power equipment and material handling equipment (forklifts, cranes, etc.).....80
- F. Verify dimensions and clearances of parts to ensure conformance to specifications, using precision measuring instruments.....200
- G. Build or manufacture to drawing, bill of material, all items to established production quality and quantity as scheduled.....2200
- H. Repair, rework, and troubleshoot electro-hydraulic and electro-pneumatic assemblies and systems to meet operational specifications.....160
- I. Test performance of electromechanical assemblies, using test instruments such as electronic meter and oscilloscope.....200
- J. Build, test, and operate new machines.....1000
- K. Train others to install, use, and maintain machines.....80
- L. Assist customers/vendors with phone or site consultation when necessary.....80

Total Hours.....8,000



Implementation

Discuss with local community college and create a required and elective class schedule, along with suggested order of completion.

Some colleges have apprenticeship coordinators on staff that can help with this step.



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ELTE 111	Introduction to Industrial Automation	R3		4.00	96
ELTE 121	Electrical Mathematics	ELTE 110 and (MATH 114 or M5) & R5		5.00	96
ELTE 122	Industrial Control Electronics	ELTE 111 & ELTE 121		5.00	112
ELTE 123	Motors and Transformers	ELTE 121		5.00	112
ELTE 131	Introduction to Machine Controls	ELTE 110		4.00	80
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2nd Year

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ELTE 121

ELTE 150 (F, Sp)

3rd Year

ELTE 122

ELTE 232

ELTE 260

4th Year

ELTE 123

ELECTIVE

ELECTIVE

(Sp)

(F)

(F)

(F)

Implementation



- Submit full outline for each field of study to the US Department of Labor (US DOL) for review and acceptance.

WORK PROCESS SCHEDULE

Occupational Title: **Industrial Electromechanical Technicians**

O*NET Code: **91-801-00** RAPIDS Code: **1000**

Description:
Operate, test, and maintain unmanned, automated, servo-mechanical, electro-hydraulic, electro-pneumatic or electro-mechanical equipment. May assist engineers in building and testing.

On-The-Job Training:
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B. Install electrical and electronic components and hardware in housings or assemblies, using soldering equipment.....	1500
C. Align, adjust, and assemble components and assemblies in accordance with drawings and templates.....	1000
D. Analyze and record test results, and prepare and test documentation.....	500
E. Operate power presses and material handling equipment (e.g., presses, etc.).....	80
F. Verify dimensions and clearances of assemblies to ensure conformance to specifications, using precision measuring instruments.....	200
G. Build or manufacture to drawing, bill of material, all items to established production quality and quantity as scheduled.....	2500
H. Repair, rework, and troubleshoot electro-hydraulic and electro-pneumatic assemblies and systems to meet operational specifications.....	160
I. Test performance of electromechanical assemblies, using test instruments such as electronic meter and oscilloscope.....	200
J. Build, test, and operate new machines.....	1000
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ELTE 232	Programmable Logic Controllers	ELTE 131		4.00	96
ELTE 250	Industrial Robotics	ELTE 131		4.00	96
ELECTIVE COURSES					
ELTE 112	Basic Soldering	None		2.00	48
ELTE 141	Basic Electronics	ELTE 110			84
ELTE 145	Electrical Prints for Building	ELTE 141		4.00	80
ELTE 261	Allen Bradley PLC-5 Advanced	ELTE 232		6.00	128
METM 110	Introduction to Machine Tooling	(METD 100 or METD 100 or Drafting Tech. & R3, W4 & M4)		4.00	96
METS 130	Industrial Hydraulics	ELTE 102 & R4, W4 & M4		4.00	96
			ELECTIVE COURSES TOTAL	24	512
			TOTAL HOURS	62	1392
PREREQUISITE COURSES (if needed)					
MATH 050	Pre-Algebra	R3, R2, M3		4.00	84
MATH 114	Technical Math I	R4 & (MATH 050 or M4)		4.00	84
METD 100	Basic Mechanical Drafting	None		3.00	48
METD 105	PC Applications for Technology	None		3.00	84

** R = Reading Level, W = Writing Level and M = Math Level

1st Year	3rd Year
ELTE 102	ELTE 122 (Sp)
ELTE 110	ELTE 232 (F)
ELTE 131	ELTE 250 (F)
2nd Year	4th Year
ELTE 111	ELTE 123 (F)
ELTE 121	ELECTIVE
ELTE 150 (F, Sp)	ELECTIVE



Apprenticeships

- History
- Apprentice Program Structure
- Apprenticeship Standards
- Type of Programs
- Program Specifics
- Required Inputs From the Employer
- Bekum's Apprentice Program
- Implementation
- ***Employer Advantages and Disadvantages***

Employer Advantages and Disadvantages



Skilled workers ***trained*** to industry/employer specifications to ***produce quality results***

Increased productivity and knowledge transfer due to ***well-developed on-the-job learning***

A stable flow of ***new skilled workers***, apprenticeship programs offer a predictable pipeline of ***program completers***

An emphasis on ***safety training*** that may ***reduce*** worker compensation costs

Employer Advantages and Disadvantages



Possibility of losing
apprentice after
completion

In the beginning
there is a period
where production is
lost

Difficult to identify
interested qualified
candidates

Having to train
apprentices could
be stressful to
your employees



TOOLS and RESOURCES to DEVELOP a REGISTERED APPRENTICE PROGRAM

- Informational materials available through the office of apprenticeship
www.doleta.gov/OA/eta_default.cfm
- Contact information
 - Office of apprenticeship, states office
www.doleta.gov/oa/stateoffices.cfm
 - State apprenticeship agencies
www.doleta.gov/oa/stateagencies.cfm
 - Office of apprenticeship regional offices
www.doleta.gov/oa/regdirlist.cfm
 - Office of apprenticeship national offices
www.doleta.gov/oa/national.cfm



A Company's Greatest Allies



Misconceptions of Apprenticeship Programs



1. It takes four years before the apprentice is contributing to the company
2. Difficult to implement
3. Expensive and time consuming
4. Sounds good but not for us

THE COMING WORKER SHORTAGE WILL COST EMPLOYERS ONE WAY OR ANOTHER.



**We always need new recruits
for the company softball team!**





Questions

