American Apprenticeship Initiative
a 21st Century Partnership
What is Registered Apprenticeship

- A centuries old concept of “EARN and LEARN”
- A U.S. Department of Labor program in partnership with businesses and labor organizations. The National Apprenticeship Act of 1937 authorized the Federal government, in cooperation with the states, to oversee the nation’s Apprenticeship System.
- Provides on-the-job training and industry-specific classroom education producing highly skilled workers.
- Minimum 144 hours a year related classroom instruction
- Programs range from 1-5 years
- THE OTHER FOUR YEAR DEGREE!
What is Registered Apprenticeship

- Pathway to a career; “grow your own” approach
- Creates beneficial programs for both apprentices and their employers
- Training programs tailored to the needs of the industry or organizations
- Range in size from one apprentice to hundreds
- Apprenticeship Programs can be set up as time-based, competency-based, and/or a combination of both
Registered Apprenticeship by the numbers

- Over 1000 occupations recognized by the USDOL.
- Approximately 500,000 apprentices nationwide; 2500 in KY.
- Over 250,000 employers have RA programs.

- 133 Individual and Joint Sponsored Programs in KY representing over 1000 employers
  - 70% Non-Union 30% Union
  - 40% Construction Related
Employer Commitment

- Determine the specific occupational/skill need for your industry.

- Select an ideal individual to suit the specific occupational need. (External hire, internal promotion, TRACK pathway.)

- Coordinator to implement and monitor the program.

- Develop a progressive wage scale based upon time and/or competencies.

- Secure the related classroom instruction segment of the program either through the local community college, in-house programs, vendors or online learning.

- Sign a basic “standards” agreement stating how the program and process will be operated.

- There is NO COST to an employer to sponsor a registered apprenticeship program.
Why Register?

* Educate workforce using a nationally accredited and proven training method

* Employee receives a nationally recognized credential

* Examples of training plans and standards available

* Potential financial incentives

* Resources, contacts, and networking opportunities

* TRACK program pipeline
Customizable Standards

Time Based
Competency Based
Hybrid
WORK PROCESS SCHEDULE
INDUSTRIAL MAINTENANCE MECHANIC
O*NET-SOC CODE: 49-9041.00 RAPIDS CODE: 0308/0308 HY

The following schedule is an example of work experience (OJL) and training considered necessary to develop a skilled and productive worker in the Industrial Maintenance Mechanic trade. Within the limits of basic trade requirements, the schedule is adaptable to local conditions.

3-Year Program

Approximate Hours

<table>
<thead>
<tr>
<th>Core Skills</th>
<th>325</th>
<th>-</th>
<th>500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubrication &amp; Inspection</td>
<td>1000</td>
<td>-</td>
<td>1600</td>
</tr>
<tr>
<td>Maintenance &amp; Repair</td>
<td>1000</td>
<td>-</td>
<td>1600</td>
</tr>
<tr>
<td>Advanced Manufacturing &amp; Robotics</td>
<td>600</td>
<td>-</td>
<td>1100</td>
</tr>
<tr>
<td>Supplemental Skills</td>
<td>975</td>
<td>-</td>
<td>1200</td>
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<tr>
<td>Total</td>
<td>3,900</td>
<td>-</td>
<td>6,000</td>
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</table>

4-Year Program

Approximate Hours

<table>
<thead>
<tr>
<th>Core Skills</th>
<th>325</th>
<th>-</th>
<th>500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubrication &amp; Inspection</td>
<td>1300</td>
<td>-</td>
<td>2000</td>
</tr>
<tr>
<td>Maintenance &amp; Repair</td>
<td>1300</td>
<td>-</td>
<td>2000</td>
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<td>1300</td>
<td>-</td>
<td>2000</td>
</tr>
<tr>
<td>Supplemental Skills</td>
<td>975</td>
<td>-</td>
<td>1,500</td>
</tr>
<tr>
<td>Total</td>
<td>5,200</td>
<td>-</td>
<td>8,000</td>
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</tbody>
</table>
## RELATED INSTRUCTION OUTLINE

### INDUSTRIAL MAINTENANCE MECHANIC

**O*NET-SOC CODE: 49-9041.00  RAPIDS CODE: 0308/0308HY**

<table>
<thead>
<tr>
<th>Core Skills</th>
<th>Lubrication and Inspection</th>
<th>Maintenance and Repair</th>
<th>Advanced Manufacturing and Robotics</th>
<th>Supplemental Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction to Industry</strong></td>
<td><strong>Lubricants and Lubrication Systems</strong></td>
<td><strong>Mechanical Power Transmission</strong></td>
<td><strong>Mechanical Drives</strong></td>
<td><strong>Metal Fabrication</strong></td>
</tr>
<tr>
<td><strong>OSHA 10-Hour</strong></td>
<td><strong>Sealants and Gaskets</strong></td>
<td><strong>Hydraulic and Pneumatic Systems</strong></td>
<td><strong>Fluid and Pneumatic Power Systems</strong></td>
<td><strong>Oxygen-Acetylene Cutting</strong></td>
</tr>
<tr>
<td><strong>CPR/First Aid/AED</strong></td>
<td><strong>Shafts</strong></td>
<td><strong>Compressors</strong></td>
<td><strong>Electrical Systems</strong></td>
<td><strong>Basic SMAW Welding</strong></td>
</tr>
<tr>
<td><strong>Math for the Trades</strong></td>
<td><strong>Bearings</strong></td>
<td><strong>Industrial Belting</strong></td>
<td><strong>Motorized and PLC Controls</strong></td>
<td><strong>Basic GMAW Welding</strong></td>
</tr>
<tr>
<td><strong>Construction Fall Protection</strong></td>
<td><strong>Gearboxes</strong></td>
<td><strong>Machinery Alignment</strong></td>
<td><strong>Robotics</strong></td>
<td><strong>Basic GTAW Welding</strong></td>
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<tr>
<td><strong>Hand and Power Tools</strong></td>
<td><strong>Mechanical Seals</strong></td>
<td><strong>Laser Shaft Alignment</strong></td>
<td></td>
<td><strong>Basic GMAW Welding</strong></td>
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<tr>
<td><strong>Safety Data Sheets</strong></td>
<td><strong>Inspection Criteria</strong></td>
<td><strong>Advanced Optical Alignment</strong></td>
<td></td>
<td><strong>Basic GMAW Welding</strong></td>
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<tr>
<td><strong>Mechanical Print Reading</strong></td>
<td><strong>Troubleshooting and Analysis</strong></td>
<td></td>
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<td><strong>Scaffold User</strong></td>
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<tr>
<td><strong>Green Awareness</strong></td>
<td><strong>Maintenance Reports</strong></td>
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<td></td>
<td></td>
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<tr>
<td><strong>Diversity Training</strong></td>
<td></td>
<td></td>
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</tbody>
</table>

### Optional Instruction

- **MW 16-hour Safety Course**
  - Pump Repair Technician Level 1
  - Vibration Analysis
  - UBC Rigging & Signaler Qualification Certificate

- **Ergonomics**
  - MOV Repair
  - Powered Industrial Truck Operator Qualification

- **Human Performance**
  - Certified SMAW
  - Certified GMAW
  - Certified FCAW
  - Certified GTAW

- **Construction Fall Protection**
  - Scaffold Erector Qualification
  - Aerial Lift Qualification

- **Green Awareness**
  - Maintenance Reports

- **Diversity Training**
  - Optional Instruction
The past 5 years in Kentucky…

1466 Completers

Average Completion Wage of $23.36 per hour

Average yearly wage of $46,700

$68,462,200.00 contribution per year
TRACKing the Storm

- Baby boomers retiring
- Employee market
- Employee ‘theft’
- Skills gap
- Reshoring
- 4 year degree mentality
- Student loan bubble
TRACK Time

- College and Career Ready Accountability Model

- New focus and renewed interest in Career and Technical Education

- Industry Certifications are measured
Pre-Apprenticeship program in partnership with the Kentucky Labor Cabinet for Registered Apprenticeship

Utilizes the current secondary Career and Technical Education infrastructure at no cost

Creates a seamless Career Pathway for students into post-secondary opportunities

Creates a pipeline of students with a good foundation and an interest in the occupation
TRACK Method

- Employer registers apprenticeship program with Labor Cabinet
- Employer works with school to identify students and selection process
- Employer chooses a minimum of a 4 courses sequence
- Employer determines if student completes successfully
- Student to receive industry certification; on-the-job hours are credited
- Post-secondary requirements determined by employer
Making TRACKs!

- Manufacturing pilot a success in 2013-2014
- The model works - 100% of students transitioned
- Manufacturing TRACK available statewide
- Double the number of programs 14-15 school year
- Expansion into skilled trades
- Apprenticeship being recognized as a valuable post-secondary option for students
TRACK Results

- Students prepared for local workforce
- Career pathway leads to the gainful employment
- Work-based learning opportunities through co-op
- Dual/articulated credit is accepted, if applicable
  - Enforces employability skills
  - Engages the hands-on learner
- No student loans
TRACK Stars!

Mid Park - Leitchfield

Stober Drives - Maysville

Dr. Schneider Automotive - Russell Springs

Machining Consortium - Henderson
TRACK Hurdles

- Misconception about apprenticeships
  - Train and leave
    - Violation of Child Labor Laws
    - Against company policy
  - Worker’s Compensation Liability Insurance
TRACK Condition

YES!

Youth Employment Solutions
On TRACK to go the distance…

Fast TRACK:

Healthcare
Information Technology
Business Services

TRACK Position:

If an employer wants to implement a registered apprenticeship program, a pipeline can be developed at the secondary level utilizing the TRACK program.
American Apprenticeship Initiative
$100,000,000 investment
25 grants nationwide

Kentucky Labor Cabinet – Education and Workforce Development Cabinet
Cabinet for Economic Development – Kentucky Community and Technical College System

KENTUCKY SKILLS NETWORK

Office of Career and Technical Education – Kentucky Hospital Association