Greater New Orleans Mechatronics Apprenticeship

April 2022
Welcome
Program Overview
Employer Spotlights
Q&A
Food and Tours
Mechatronics is an emerging, interdisciplinary branch of engineering that combines skills and knowledge in:

- Electrical and mechanical systems
- Electronics
- Robotics
- Control Systems

Mechatronic technicians are employed in many industrial environments, including energy, plastics, advanced manufacturing, and aerospace.
Program Details

Mechatronics graduates are prepared for positions in manufacturing, mechanical, automation, and machine technician maintenance roles.

Program Overview

- Two-year program (currently in Cohort 3)
- Earn While You Learn apprenticeship model
- Tuition and fees covered by employers
- Apprentices earn $13/hr (or more) plus benefits
- Receive Mechatronics Certification and ~20 industry-based credentials upon graduation
The program is a two-year commitment that involve rotations from your respective workplace for 8 weeks and in the classroom for 8 weeks. Apprentices attend all three community colleges, but only work with one employer.
• Apprentices attend 8-week sessions at each community college and 8-weeks at their respective employer

• Apprentices will only be employed by **ONE** company throughout the program

• Applicants can apply to more than one company during the application process
Standout apprenticeship applicants have a willingness to learn and are motivated solve problems

**Requirements**

- Applicants must be 18 years or older by August 2022
- Must have a high school diploma or equivalent by June 2022
- Must be able to pass an employer drug screening
- Must be able to lift 50 pounds occasionally
- Must regularly attend required class sessions at all three school locations and on-the-job training at one company facility
Classes focus on teaching the use of advanced manufacturing skills involving robotic technologies, electromechanical systems, and troubleshooting and maintenance.

<table>
<thead>
<tr>
<th>Year One</th>
<th>Year Two</th>
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<tr>
<td>Leadership Awareness &amp; Safety</td>
<td>Conflict Resolution</td>
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<td>Microcomputers</td>
<td>Math for Technology</td>
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<td>Applied Writing</td>
<td>PLC II</td>
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<td>PLC Level I</td>
<td>Maintenance Installation and Repair</td>
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<td>Blueprint Reading</td>
<td>Client Relations</td>
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<td>Leadership, Teamwork, &amp; Professional Ethics</td>
<td>Technical Communications</td>
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<td>Discrete Math</td>
<td>Electrical 3 &amp; 4</td>
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<td>Electrical 1 &amp; 2</td>
<td>Business Basics</td>
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<td>Introduction to Robotics</td>
<td>Data Tasking, Email, and Collaboration</td>
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<td>Customer Service and Sales</td>
<td>Mechanical: Fluid, Hydraulics, Pneumatics, and Power Transmission</td>
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<td>Mechanical</td>
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<td>Quality Assurance</td>
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Apprentices receive industry-based credentials that provide the stackable skills to prepare students for success in the advance manufacturing sector.

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<thead>
<tr>
<th>Certification</th>
<th>Organization</th>
<th>College Partner</th>
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<tbody>
<tr>
<td>Data Analytics</td>
<td>NC3</td>
<td>NTCC</td>
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<tr>
<td>First Aid and CPR</td>
<td>American Health and Safety Institute</td>
<td>Delgado</td>
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<tr>
<td>Forklift Certification</td>
<td>National Safety Council</td>
<td>Delgado</td>
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<tr>
<td>Fundamentals of Robotics</td>
<td>FESTO/NC3</td>
<td>NTCC</td>
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<tr>
<td>Fundamentals of Industry 4.0</td>
<td>FESTO/NC3</td>
<td>NTCC</td>
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<td>Hazardous Materials Awareness</td>
<td>National Institute of Environmental Health Sciences (NIEHS)</td>
<td>Nunez</td>
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<tr>
<td>Hazardous Materials Operations</td>
<td>National Institute of Environmental Health Sciences (NIEHS)</td>
<td>Nunez</td>
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<tr>
<td>Introduction to Mechatronics</td>
<td>FESTO/NC3</td>
<td>NTCC</td>
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<tr>
<td>Machinist Certificate Bench</td>
<td>LCTCS</td>
<td>Delgado</td>
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<tr>
<td>Machinist Certificate CNC</td>
<td>LCTCS</td>
<td>Delgado</td>
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<tr>
<td>Machinist Certificate Lathe</td>
<td>LCTCS</td>
<td>Delgado</td>
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<tr>
<td>Machinist Certificate Mill</td>
<td>LCTCS</td>
<td>Delgado</td>
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<tr>
<td>NCCER Core Curriculum</td>
<td>NCCER</td>
<td>Nunez</td>
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<td>NCCER Electrical Level 1</td>
<td>NCCER</td>
<td>Nunez</td>
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<td>NCCER Electrical Level 2</td>
<td>NCCER</td>
<td>Nunez</td>
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<tr>
<td>NCCER Instrumentation Level 1</td>
<td>NCCER</td>
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<tr>
<td>NCCER Instrumentation Level 2</td>
<td>NCCER</td>
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<td>OSHA10</td>
<td>OSHA Training Institute (OTI)</td>
<td>Nunez</td>
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<td>Personal Protective Equipment (PPE)</td>
<td>3M/National Coalition of Certification Centers (NC3)</td>
<td>NTCC</td>
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<tr>
<td>Precision Measuring Instruments</td>
<td>Snap-on Starrett Precision Measurement Instruments Certification (NC3)</td>
<td>NTCC</td>
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<tr>
<td>Fundamentals of PLCs Allen Bradley</td>
<td>NC3</td>
<td>NTCC</td>
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<tr>
<td>Fundamentals of PLCs Siemens</td>
<td>NC3</td>
<td>NTCC</td>
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<tr>
<td>Fundamentals of Sensor Technology</td>
<td>NC3</td>
<td>NTCC</td>
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<tr>
<td>Dremmel LC40 Laser Cutter</td>
<td>NC3</td>
<td>NTCC</td>
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Apprentices will have the opportunity to learn in a state-of-the-art mobile lab that will prepare students with skills in robotics, PLC, and many mechanical disciplines.
Employers are central throughout the application process by leading applicant interviews and screening.

- Applications open each year in April and close in May.
- Open Houses/Assessments/Interviews in mid-June.
- Candidates selected in early July.
- Orientation and Signing Ceremony with employers in mid-July.
- Cohort begins in August.
Welcome to Elmer Chocolate
Caramel
Strawberry Crème
Orange Crème
Cocoa Truffle
Chocolate Caramel
• Oldest family owned chocolate company in the US – since 1855.

• Has grown from regional general line candy company to a leader in seasonal chocolate throughout North America. We are the 2nd largest heart-box chocolates manufacturer in the USA.

• We make chocolates and package them in different formats for various occasions. Proudly made in the USA.

• One location in Ponchatoula, LA
  Plant size 676,000 sq ft
  Employees: 340+

Since 1855

Purpose and Core Values

**Purpose**
To foster and celebrate life's opportunities.

**Core Values**

- **Cherish Family**
  - Support and encourage our home, Elmer, and community families
  - Build a team where everyone is valued and makes a difference.
  - **STAND TOGETHER**

- **Demonstrate Respect**
  - Value the contributions of others.
  - Communicate openly and honestly.
  - **ACT WITH HONOR**

- **Take Responsibility**
  - Be accountable to others.
  - Put forth our best effort.
  - **GET THE JOB DONE, RIGHT**

- **Learn and Grow**
  - Develop our gifts and talents.
  - Find a better way.
  - **EXCEL AND SUCCEED**
(1) fully automated moulding line  
(3) fully automated pick & place systems  
(11) de-palletizers and palletizers  
Maintain, PM, troubleshooting, repairing, upgrading.  
Solid base for many opportunities throughout the organization, i.e. Mechatronic, Technician, Operator, Trainer, Parts.
Introduction to Laitram/Intralox
Mechatronics Apprenticeship Program
Laitram Corporate Structure

- Laitram
  - Laitram Machinery
  - Intralox
    - Commercial Food Sanitation
  - Lapeyre Stair
  - Laitram Machine Shop
How Laitram started . . .

From the Patented ideas of James Martial Lapeyre ("J.M.")

- Automated Shrimp Peeler - 1949
- Inventions revolutionized the shrimp processing and conveying industries
- Earned 191 U.S. patents during his lifetime
- Shrimp Peller named an Historic Mechanical Engineering Landmark by ASME - 2004
- Laitram is J.M.’s middle name, Martial, spelled backwards
We are the inventors and leading innovators of modular plastic belting, with more experience in its design, engineering, and application than any other company on the market.

THOUSANDS OF INDUSTRY APPLICATIONS

- Abrasion resistant
- Accumulation
- High temperature
- Pasteurizers
- Radius
- High impact
- Spiral
Intralox Technologies

ThermoDrive® Technology
Patented tensionless belt system creates new opportunities in hygienic conveyance design

Activated Roller Belt™ Technology
Intralox industry-specific experts can help determine where ARB technology can provide the most value to your layout

Spiral Solutions
Improve efficiency, reduce total cost of ownership, and provide reliable, consistent performance

intralox.com
100+ COUNTRIES WITH DIRECT SERVICE

2000+ GLOBAL EMPLOYEES

60K+ CUSTOMERS WORLDWIDE
R&D CENTERS: 3
ACTIVE PATENTS: 1222
U.S. PATENTS PER YEAR*: 20
ENGINEERS WORLDWIDE: 127

INVENTORS
Modular Plastic Belting
ThermoDrive® Tensionless Belt System
Activated Roller Belt™ (ARB™) Technology
DirectDrive™ System

NEW PRODUCT DEVELOPMENT
Data-based research
Testing in the field and at our facilities
Continuous operational insight
Industry-specific engineering teams

*on average
Intralox Manufacturing – Plastics/MEG

The Plastics Department molds all components for our belting

Locations:
• Harahan
• Hammond

Groups:
• Equipment Maintenance Group
• Mold Maintenance Group
• Mechanical Engineering Group - Automation Department
Precision Maintenance
State of the Art Robotics/Electronics/3D Printing
Mold Maintenance and Repair
Advanced Labs and Testing Equipment
Laitram Corporate Overview
What is Zatarain's?

**History:** Founded in 1889 in Uptown New Orleans
Relocated to Gretna in 1960’s
Purchased by McCormick in 2003
Major facility expansion 2014-2018 ($30MM)

**Products Manufactured:** Rice Mixes, Breading (Fish Fri, Baking Mixes) in Cartons and Pouches, Bottled Spices and Liquids

**Manufacturing Equipment:** Bulk Silos, Spice Blending, 10 Production Lines, 2 Robotic Multi-Line Palletizers
Who is Zatarain's?

Our Code

- 50% increase in profits
- 0 losses
- 4 our customer, team, and community

New Orleans, LA

Vision

Delivering big business by bringing the spirit of New Orleans flavor to everyday.

Plant Mission

We use our passion, teamwork, and drive for excellence to keep Gretna a great place to work - enabling us to deliver safe, high quality products for Zatarain's and McCormick.
Go to

https://gnoinc.org/doing-business/workforce/mechatronics/

for more information and to apply!
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