The long-term success of the Greater New Orleans region is predicated on our ability to expand and sustain a skilled workforce available to our region’s growing industry sectors. Using a demand-driven workforce development approach, GNO, Inc. works closely with employers and higher education institutions to promote collaboration that would help grow and sustain the regional talent pipeline.

**Mechatronics Apprenticeship Training Program (Pilot)**

In an unprecedented partnership, three companies and three two-year colleges – Laitram, Zatarain’s, Elmer Chocolate, Delgado Community College, Northshore Technical Community College and Nunez Community College – have come together to develop a pilot mechatronics apprenticeship program as a way to address the shortage of mechatronics workers in advanced manufacturing jobs.

The program will teach the fundamentals of mechatronics, a field that incorporates mechanics, electronics, and computer science with manufacturing to increase efficiency.

**What is Mechatronics?**

Mechatronics is an emerging, interdisciplinary branch of engineering that combines skills and knowledge in electrical and mechanical systems, electronics, robotics and control systems. Mechatronic workers are employed in many industrial environments, including energy, plastics, advanced manufacturing, and aerospace.

**Program Summary & Curriculum**

The Mechatronics Apprenticeship Training Program’s curriculum is designed to enhance and prepare the apprentice to be fully qualified in multiple aspects of advanced manufacturing technology. The two-year commitment will provide both technical classroom instruction and on-the-job training using an earn-while-you-learn model with training costs covered completely by the employer.

Once assigned to an employer, apprentices will earn a paycheck while learning on-the-job. Apprentices will alternate between eight weeks of classroom work and eight weeks at their chosen company for the duration of the program. Participants in the program will gain experience in a wide range of core competencies including motor controls, basic machining (mill, lathe, drilling, tapping, etc.), blueprint reading, functions of electrical and electronic systems, plus much more.

**Year One**

- Leadership Awareness & Safety
- Micro-Computers
- Applied Writing
- PLC Level I
- Blue Print Reading
- Leadership Teamwork/Professional Ethics
- Discrete Math
- Electrical 1 & 2
- Introduction to Robotics
- Customer Service, Sales and Skills
- Mechanical
- Quality Assurance

**Year Two**

- Conflict Resolution
- Math for Technology
- PLC II
- Maintenance Installation and Repair
- Client Relations
- Technical Writing for English
- Electrical 3 & 4
- Business Basics
- Data Tasking, Email and Collaboration
- Mechanical: Fluid, Hydraulics, Pneumatics and Power Transmission

The ultimate goal of the program is to create an innovative, industry-driven approach to education that will bring in a new wave of talent to our workforce and cultivate skills for the future. GNO, Inc. believes this program has the potential to be utilized across the advanced manufacturing industry.