









Meeting the needs of Manufacturing, Logistics, and Supply Chain Companies since 2011



Outreach, Recruitment & Screening

High School Manufacturing Day

Calumet GREEN

Manufacturing Internship AGES 18-24

Maker Lab Network & Entrepreneurship Training



Technical Training at Colleges

PRE-HIRE AND INCUMBENT **TRAINING**

Job Placement & Matchmaking

1,000 JOBS







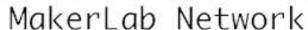
Calumet Manufacturing Industry Sector Partnership

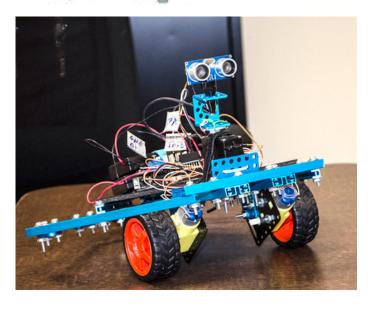
- 100+ manufacturing companies engaged since 2011
- Quarterly meetings offer regular feedback for Colleges and High Schools, influencing their curriculum
- Looking for next generation talent
- Share best practices on managing a talent pipeline
- Network with local supply chain
- Learn about upcoming courses, internships and other important resources



SouthWorks







- Monthly courses offered in: 3D Printing, Laser Cutting, Arduino, CAD design, Robotics, etc.
- Open lab hours each week
- Over 150 residents trained to date
- Summer camps and workshops for over 50 kids in Park Forest
- Working closely with Rich East High School
- 10 Entrepreneurs trained in product development, offering new Etsy class
- Prototyping tools and assistance











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Come join these industrial companies who have recently or have underway over <u>Five hundred and fifty million dollars</u> in new investments the Chicago Southland

AAL Organics
Al-Amin Brothers Transportation LLC
Alsip MiniMill, LLC
Amazon.com, Inc.
Ardagh Group
Dutch American Foods
Ed Miniat LLC
Gerresheimer Glass, Inc.
Harcross Chemicals, Inc.
Kloeckner Metals
Mi-Jack Products
Nufarm
Sterling Lumber
Skyline Furniture
Winpack Ltd.

In the pipeline, companies are considering more than five hundred million in additional investments.

SOUTHWORKSENGINEERING AND ROBOTICS

2017 Program Proposal

southworksrobotics.com



SERO: PROGRAM OVERVIEW



The purpose of the Southworks
Engineering and Robotics Olympics is
for regional manufacturing companies
to sponsor and partner with local high
schools to develop their individual
projects for the 2017 Spring Competition.

Working together we can creatively support learning outcomes by combining classroom instruction with your industry expertise.

We have designed several manufacturing challenges that local companies and student clubs can work collaboratively on in a healthy competition designed to encourage their team-building, problem solving creativity and unique engineering ability.



BENEFITS OF CORPORATE SUPPORT:

Industry Awareness

 Bringing awareness to career opportunities in the manufacturing sector

Talent Recruitment

 Opportunity for companies to identify future employees while helping students compete

Community Support

 Contribute to local schools and students to enhance their programming and education

PARTICIPATING SCHOOLS





















HOW THE PROGRAM WORKS:

"EDUCATION IS THE KINDLING OF A FLAME NOT THE FILLING OF A VESSEL."

COCRATES

All schools in the Chicago Southland region are invited to participate. Each school will be given a registration packet during the orientation that explains the competitions in detail, how they will be judged, and key dates to keep everyone on track.

The competition will take place in the Spring of 2017 and the location and date will be confirmed once school resumes in September 2016.



How to PARTNER

We are asking companies to commit to the following minimum requirements:

- · Complete a registration form
- · Attend initial fall meeting with school
- Dedicate one staff person to the project throughout the school year
- · One in person meeting per month
- · Compete in one spring event
- · Commit at least \$1000 to the initiative*

*Payment will be made to CSECD and distributed to partnering schools

Companies are welcome to go above this minimum level of support in any of the above areas (ex. meet more times a month, involve more staff) but these points will be used to establish a baseline.

Companies may select their preferred school or can be appointed a school based on location. The goal is to pair every interested school with a local company.



MATERIAL LIST AND RULES

The materials list and judging rubric will be provided at the initial fall meeting so schools and companies know exactly what the judges will be looking for. The dates and meeting times will be determined by each school partner. Jason Thomas will answer all programming questions throughout the region. He will facilitate all orientations and coordinate all of the program logistics. His email address if jasonythomas@gmail.com and the website for the event is southworksrobotics.com All updates and info will be posted monthly.

SOUTHWORKS OLYMPIC TEAM:



BRIEF COMPETITION DESCRIPTIONS:

SUMO Survivor

 Your Goal: Each robot has to find its opponent and cast it out of a 12 foot diameter ring in 2 minutes.

Catapult Launch

 Your Goal: Using approved supplies on the list, build the catapult that will launch the approved projectile the furthest.

ROBO Pathfinder

 Your Goal: Build a robot that will successfully follow a line and react to motion, light, or touch.

VEX Robotics

 Students will compete in timed competitions designed by club advisors and industry partners using VEX Kits.

Autonomous Racer

 The Goal: build a driverless vehicle that can reach the finish line the fastest without electricity.

TETRIX Robotics

 Students will compete in timed competitions designed by club advisors and industry partners using TETRIX Kits.

HIGH SCHOOL COMITTMENT

Here are the steps interested schools need to complete:

- · Complete a registration packet
- Attend initial fall meeting with their company
- Dedicate one staff person to the project throughout the school year
- Coordinate students for one in person meeting per month with company partner
- · Compete in at least one spring event



Promoting Industrial Careers with Regional High Schools

Training Facilities and Manufacturing Day



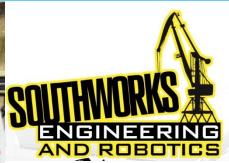


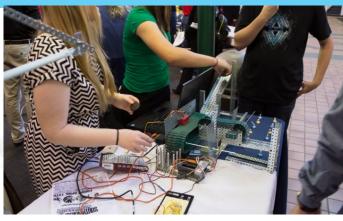


- 300 students attended MFG Day in 2015 from 16 High Schools
- October 5, 2016 planning for upcoming MFG DAY. 20 schools!
- Planning for enhanced manufacturing training facilities at 5 High Schools
- Dist 227 and Rich East are regional leaders!
- Coordinating regional STEM Learning Exchange for Manufacturing

Southworks Engineering & Robotics Olympics







- Aiming for Robotics teams at each regional High School this school year
- Matching each school with a local manufacturing company for mentorship and sponsorship, asking for \$1,000 from each company
- Competition will be inclusive of a variety of types of teams/ clubs
- STEM learning benefits including team work, design, prototyping and physics
- Hoping to grow each year, eventually into the middle and elementary schools
- Need more support from community for growth and sustainability



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