

FOUNDRY 4.0 & METAL CASTING CENTERS
University of Northern Iowa

CENTER FOR BUSINESS **GROWTH & INNOVATION**

The UNI Metal Casting Center (MCC) leads the way in materials research, metal manufacturing, and foundry education. With cutting-edge metal casting, molding, and 3D printing technology, the MCC pushes the boundaries of learning and technology. The UNI Foundry 4.0 Center works directly with industry partners, pioneering new technologies and processes to enhance the supply chain. Utilizing special materials and additive manufacturing methods, the center brings these innovations to the marketplace. Undergraduate computer science students contribute to this technological evolution, generating valuable data for research efforts that optimize foundry processes with machine learning algorithms.

Nate Bryant, Sam Manernach, Joshua O'Dell
UNI Foundry 4.0 and Metal Casting Centers

nathaniel.bryant@uni.edu, joshua.odell@uni.edu
samuel.manernach@uni.edu,
<https://mcc.uni.edu>



FOUNDRY 4.0
BUSINESS SOLUTIONS

2-DAY
STEPS TO SUCCESS
WORKSHOP
events



The Center for Business Growth & Innovation (CBGI) is a trusted advisor for small to mid-sized enterprises, specializing in tailored services for business growth and transition. With a focus on Industry 4.0, we connect foundries nationwide to innovative practices, promoting sustainability and resilience in the casting industrial supply chain. In collaboration with UNI Centers and the Foundry 4.0 Partnership, CBGI is at the forefront of advancing businesses into a new era of manufacturing.

CBGI has developed the Industry 4.0 Assessment Tool tailored for businesses exploring Foundry 4.0 implementation. This strategic tool evaluates and utilizes automation and technology requirements, offering a clear roadmap for success in smart manufacturing. It aims to optimize operations, minimize production time, and enhance overall efficiency.



Get access to our our registration form, scan or click the QR code.

Todd E. Hutcheson, Executive in Residence
UNI Center for Business Growth & Innovation



todd.hutcheson@uni.edu
www.advanceiowa.com

The YSU Division of Workforce Education and Innovation Center is a hub uniting the YSU Excellence Training Center and the online Skills Accelerator. Together, we address the skills gap, forge alternative learning pathways, and equip the workforce for rapidly evolving industries. Our mission is to actively bridge the divide, ensuring individuals are prepared for the demands of a changing professional landscape. Join us on this journey of innovation, skill development, and workforce empowerment for success in today's dynamic industries.

Andy Prokop, Project Technician
YSU - Excellence Training Center (ETC) in Kohli Hall

ajprokop01@ysu.edu
<https://ysu.edu/excellence-training-center>

Partnering with ReWild Group, we offer two key opportunities for business growth: Business Assessments and Growth Groups. Every business undergoes the universal Seven Stages of Growth, and our 30+ years of research distilled this into a roadmap for identifying challenges and foreseeing hurdles. Calculate your stage of growth and explore our Business Assessment, delving into Business Development, Business Model & Plan, Finance, Leadership, Operations, and Workplace Community for profound insights. Join our Organizational Rewilding Growth Groups to collaborate, learn, and grow with like-minded individuals. Committed to your growth, we're here to help you overcome business complexities and unlock your enterprise's full potential.

The ReWild Group
Matthew Pohl, Principal

mpohl@rewildgroup.com
www.ReWildGroup.com



Foundry 4.0 Steps to Success 2-day Workshop

Agenda Overview

Wrightsville, PA 10-11
Pittsburg, TN 24-25
January | 2024

Foundry 4.0 Steps to Success 2-day workshop events begin at 8:00 on both days

Donsco, Inc. 124 N Front St., Wrightsville, PA | Wednesday & Thursday, January 10 & 11, 2024

Lodge Mfg. 204 E 5th St., South Pittsburg, TN | Wednesday & Thursday, January 24 & 25, 2024

Workshop Sessions: Four Steps Towards Success

- #1 Exploration of Foundry 4.0, Evaluation Procedure, and Business Impact
Discover effective techniques for assessing Foundry 4.0, identifying deficiencies, and prioritizing opportunities to maximize business impact.
- #2 Design for Success, design for excellence (Dfx)
Learn the cost-saving benefits of designing for automation excellence, contributing to overall cost reduction strategies.
- #3 Technical Data Gathering and Analysis in Industry 4.0/Foundry 4.0
Explore the core role of data in Industry 4.0/Foundry 4.0, focusing on IoT sensor integration and the utilization of Big Data in the context of metal casting.
- #4 Organizational Rewilding and ReWild Business Assessment: A Dual Insight
Discover Organizational Rewilding, a strategy designed to promote sustainable business growth. Learn about the RBA's role in transformation, highlighted by key findings and success stories.

COMPLIMENTARY
WORKSHOP

Attend In-Person
or Online!

Workshop Highlights

- » **Foundry 4.0 Unveiled:** Explore the essentials - Overview, Assessment, and Business Value.
- » **Strategic Automation & Design:** Learn efficient design strategies for automation in Foundry 4.0.
- » **Revolutionizing Casting:** Dive into Robotic Casting Finishing & Process Sensors.
- » **Smart Applications:** Explore Sensor/PLC Applications, IoT, and Data Analysis.
- » **Innovative Robotics:** Witness a Dual Robot with a 3D Bin-picking System in action.
- » **Business Evolution:** Move from theoretical examples to tangible Business Innovation & Growth.
- » **Organizational Rewilding:** Gain insights grounded in the Stages of Growth for sustainable growth.
- » **Expert Panel Q&A:** Engage with YSU ETC, Foundry/Post-processing Lab, and 3D Scanner experts.
- » **Collaborative Discussions:** Participate in engaging discussions with industry experts.
- » **Networking Hub:** Foster connections, share insights, and stay updated on current trends.
- » **Foundry Tours:** Immerse yourself in daily comprehensive tours (in-person registration required).

Register NOW! Complimentary Workshop: Attend In-Person or Online!

Two Workshop Locations



Hosts & Organizers

Chris BUCK, Donsco Inc.
VP, Operations

Scott LAKEY, Lodge Mfg.
Director of Foundry Operations

University of Northern Iowa (UNI): Center
for Business Growth & Innovation (CBGI)

Paul KINGHORN, UNI-CBGI, Director

Todd HUTCHESON, UNI-CBGI, EIR

Guest Speakers

Andy PROKOP, YSU, Excellence Training Center
Project Technician

Matthew POHL, The ReWild Group, LLC
Certified Adviser & Instructor

University of Northern Iowa (UNI): Foundry
4.0 & Metal Casting Centers (MMC)

Josh O'DELL, UNI, F4.0 Center, Project Engineer

Sam MANTERNACH, F4.0 Center, Project Engineer

Nate BRYANT, UNI, Ind. Tech. Center, Asst. Project Manager

Partners:

