

# Academic Innovations to Amplify Workforce Partnerships

**University of Wisconsin-Stout**

**Dr. Katherine Frank, Chancellor**

**Glendalí Rodríguez, Provost**

**Dr. David Ding, Associate Dean**

**Dr. Kelly Droege, Program Director**



# UW-Stout's Polytechnic Distinction

*Only 3% of U.S. Higher Education Institutions Are Polytechnics.*



## Applied Learning & Research.

Hands-on education to produce innovative solutions to real-world problems.



## Business & Industry Collaboration.

Innovative partnerships that benefit students and grow the economy.



## Career-Focused Experiences.

Real-world opportunities that prepare graduates for professional careers.



# UW-Stout's Polytechnic Advantage

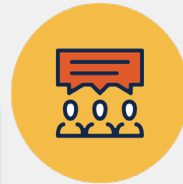
*Our Distinction in the Details.*



Practical Experience

**1,000+**

internships across the U.S.



Program Advisory

**100%**

advised by industry professionals



Unmatched Employment

**99%**

employed or continuing education

University Facilities

**3x Labs & Studios**

as traditional classrooms

Industry Partnerships

**700+**

internship & research partners

Industry-Ready

**50%+**

industry-credentialed graduates



University of  
Wisconsin-Stout

# UW-Stout's Polytechnic Advantage

*Graduates in High Demand.*

99%

Near Perfect Employment  
for More Than a Decade

\$58K

Average Starting Salary



# 2024: “Year of the Worker”

*“Making sure our workforce is prepared to meet the needs of a 21st-century economy is a top priority for me. And my administration is going to lead by example.”*

*It’s why, tonight, I’m declaring 2024 the Year of the Worker in Wisconsin.”*

**~Governor Tony Evers  
(January 23, 2024)**



# Educational Ecosystem

- P-20 Pipeline
  - Technical Colleges
- 700+ Business & Industry Partners
  - Program Advisory Committees & Employers
- Innovation Programming
  - Smart Automation Certification Alliance (SACA)





# Professional Development & Innovation

- Strategic, Meaningful, Future-Focused
- Alliance for Innovation & Transformation (AFIT)
  - Summer 2023: Leading Educational Advancement through Polytechnic Pathways (LEAPP)
    - Process for Innovation
    - Changing the Rate of Change
  - Summer 2024: AI+



# Polytechnic Leadership

- Statewide Taskforce Representation (Dr. David Ding)
- Universities of Wisconsin Board of Regents Presentation
- University-wide Professional Development
- University Call for Digital Literacy Proposals
- Outreach to 500+ Industry Advisory Council members





# Polytechnic Leadership

- State-identified Sectors:  
Engineering, Healthcare,  
Computer/Data Science,  
Business/Finance
- Establishment of  
Artificial Intelligence Fellows  
Cross-disciplinary Cohort
- AI Cohort Lead
- AI Integration Technologist
- Survey of Employer Partners  
Informing Actions



# Academic Innovations to Amplify Workforce Partnerships

**Dr. Xuedong (David) Ding**

*Associate Dean/Director*

Robert F. Cervenka School of Engineering

**Dr. Kelly Droege**

*Assistant Professor/Program Director*

M.S. Training & Talent Development

to



**Dr. David Ding**  
dingx@uwstout.edu

## #StoutProud

- B.S. Economic Development (1993)
- M.S. Industrial System Engineering (2003)
- Ph.D. Industrial System Engineering (2006)
- Associate Dean, CSTEMM
- Program Director, B.S. Automation Leadership

## 12 Years of Industry Experience

- Six Sigma Process Improvement, Value Chain Management
- Multiple Professional Certifications



# University breaks new ground in manufacturing world with industry-inspired automation leadership degree

UW System Board of Regents approves flexible program that stacks management skills onto smart automation training

## B.S. Automation Leadership



University of  
Wisconsin-Stout



# Program Innovations

Focus on Career Outcomes

Stackable Credentials

Multiple Entry Points

Multiple Exit Points

Continued Upskilling

Slide created by Dr. Colleen McCabe, Provost/Vice President, Wisconsin Technical College System

# Strategic Industry Partners



P: (262) 544-4811  
W: www.Generac.com



01/06/2023

President Jay Rothman  
University of Wisconsin System  
1720 Van Hise Hall, 1220 Linden Drive  
Madison, WI 53706

Dear President Rothman,  
RE: Letter of Support- Univer



1917 Four Wheel Drive  
Oshkosh, WI 54902  
920.502.3009  
oshkoshcorp.com



Ronald G. Wanek  
founder & Chairman Of The Board

December 12, 2022

President Jay Rothman  
University of Wisconsin System Administration  
1720 Van Hise Hall, 1220 Linden Drive  
Madison, Wisconsin 53706

Re: Support of proposed B.S. in Automation Leadership for the University of Wisconsin-Stout

Dear President Jay Rothman,

I would like to first congratulate yourself on earning the leadership role as the 9<sup>th</sup> President of the University of Wisconsin (UW) System earlier this year. As you are aware, the responsibilities that follow are significant and must ensure that Wisconsin is a leader in both post-secondary education and the development of talent – to best compete within a global economy.

When I began Arcadia Furniture Corporation in 1970, now known as Ashley Furniture Industries, LLC, (Ashley), we began very small and by the end of our first year we grew to 35 employees. Even though we were small, our aspirations were big to become the best in the industry. Throughout our history, a large part of our company's growth was made possible through effective educational and training opportunities that positively impacted the career paths of our near 4,000 team members in Wisconsin and over 30,000 team members across the globe.

Our team is proud to share that we have continued to develop meaningful partnerships and have worked very closely with both K-12 and post-secondary education throughout the country, including the UW System and UW-Stout. To enhance this partnership, I am pleased to write this letter of commitment in support of the proposed B.S. in Automation Leadership program submitted by the UW-Stout.

The proposed program is being created directly in response to our workforce needs in the area of digital transformation. There is a workforce shortage of graduates prepared for positions in diverse automation and digital leadership roles. As Wisconsin's Polytechnic University, UW-Stout is positioned to help fill that need. The program aligns with UW-Stout's mission to deliver a career-focused education, via applied learning and collaborative partnerships.

I admire yourself and your staff for leading this great endeavor. Please know that Ashley is committed to growing our educational partnerships and I would very much look forward to the opportunity to connect with you and your team in the upcoming year. Thank you for your level of dedication and I wish you a Happy Holiday Season.

Sincerely,

Ron Wanek  
Founder and Chairman  
Ashley Furniture Industries, LLC.

ONE ASHLEY WAY • ARCADIA, WI 54612 • PHONE 608-323-6222

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Date: Jan  
Re: Univer



MERCURY MARINE  
P.O. Box 1393  
Fond du Lac, WI 54936  
MercuryMarine.com

December 21, 2022

President Jay Rothman  
University of Wisconsin System Administration  
1720 Van Hise Hall, 1220 Linden Drive  
Madison, WI 53706

Dear President Rothman,

I am pleased to write this letter of commitment in support of the proposed B.S. in Automation Leadership program submitted by the University of Wisconsin-Stout.

The proposed program is being created directly in response to our workforce needs in the area of digital transformation. There is a workforce shortage of graduates prepared for positions in diverse automation and digital leadership roles. As Wisconsin's Polytechnic University, UW-Stout is positioned to help fill that need. The program aligns with UW-Stout's mission to deliver a career-focused education, via applied learning and collaborative partnerships.

Please feel free to reach out if you need additional information or have questions.

Sincerely,

Chris Drees  
President – Mercury Marine

Dear Presi  
I am please  
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Sincerely,

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BRIGGS & STRATTON, LLC

January 2, 2023

President Jay Rothman  
University of Wisconsin System Administration  
1720 Van Hise Hall, 1220 Linden Drive  
Madison, WI 53706

Dear President Rothman,

I am pleased to write this letter of commitment in support of the proposed B.S. in Automation Leadership program submitted by the University of Wisconsin-Stout.

The proposed program is being created directly in response to our workforce needs in the area of digital transformation. There is a workforce shortage of graduates prepared for positions in diverse automation and digital leadership roles. As Wisconsin's Polytechnic University, UW-Stout is positioned to help fill that need. The program aligns with UW-Stout's mission to deliver a career-focused education, via applied learning and collaborative partnerships.

Please feel free to reach out if you need additional information or have questions.

Sincerely,

Steve Andrews  
President & CEO  
Briggs & Stratton, LLC



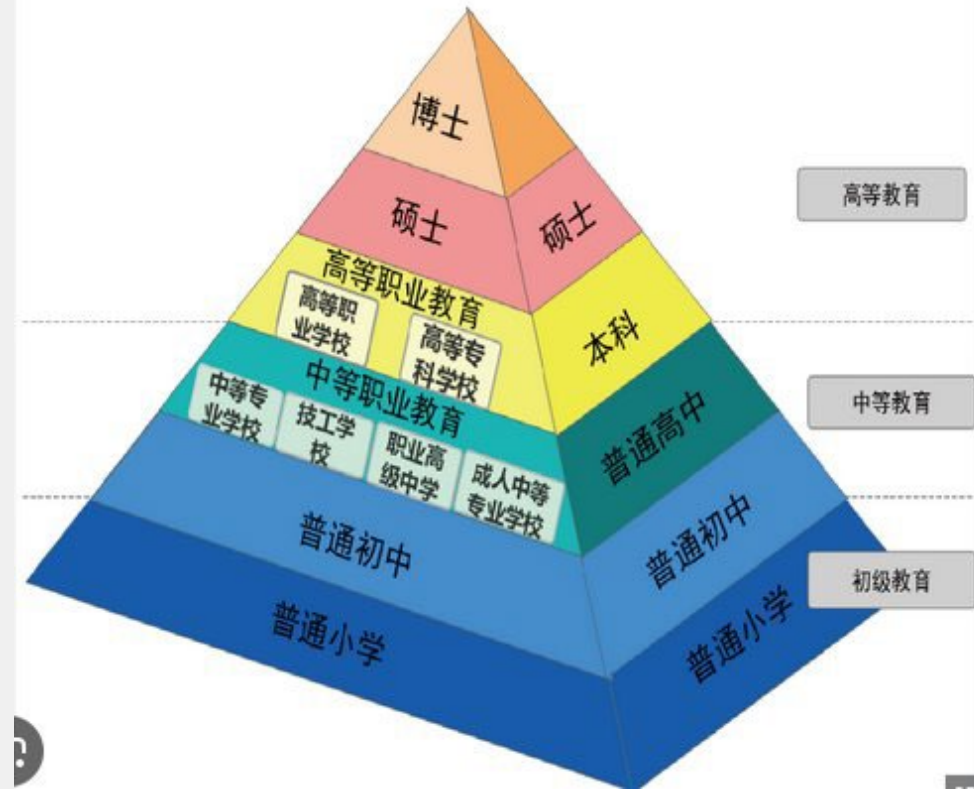
University of  
Wisconsin-Stout

# International Benchmarking

## The school system in Germany



## 中国教育体系结构图





# Degree Pathway

**1**  **ACA**

Complete  
Professional Core  
Classes (40 Credits)

+

General Education  
Credits for Transfer  
(Up to 27 Credits)

**2**

 **UW-Stout**

Complete Automation  
Leadership Core Classes  
Online (19 Credits)

+

 **ACA**

Complete  
Professional-Level  
Classes (21 Credits)

**3**

 **UW-Stout**

Complete Remaining  
General Education  
Credits Online



**B.S. Automation  
Leadership Degree**  
(120 Credits)





# **UW-Stout Automation Leadership Courses**

- **Digital Transformation**
- **Internet of Things in Operations**
- **Project Management**
- **Organizational Leadership**
- **Lean Manufacturing**
- **Automation Leadership Internship**
- **Automation Leadership Capstone**





**Dr. Kelly Droege**  
droegek2005@uwstout.edu

## #StoutProud

- B.S. Psychology (2005)
- M.S. Training & Development (2007)
- Assistant Professor/Program Director  
M.S. Training & Talent Development

## 25+ Years of Industry Experience

- Healthcare
- eCommerce
- Manufacturing



# Gov. Evers praises new workforce development certificate, tours academic labs

University 'should be proud' of state-aligned training program that supports employees and employers

**Workforce Development Specialist  
Apprenticeship**



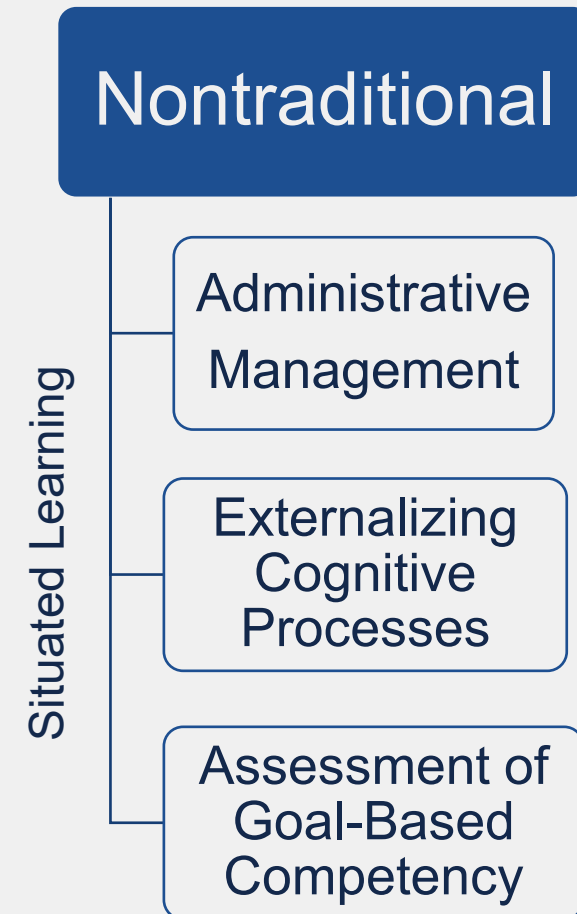
**University of  
Wisconsin-Stout**

# Registered Apprenticeship





# Registered Apprenticeship Structures



# Workforce Development Specialist



2000 Hours

144 Hours



University of  
Wisconsin-Stout

# Strategic Industry Partners



# Innovative Educational Pathways



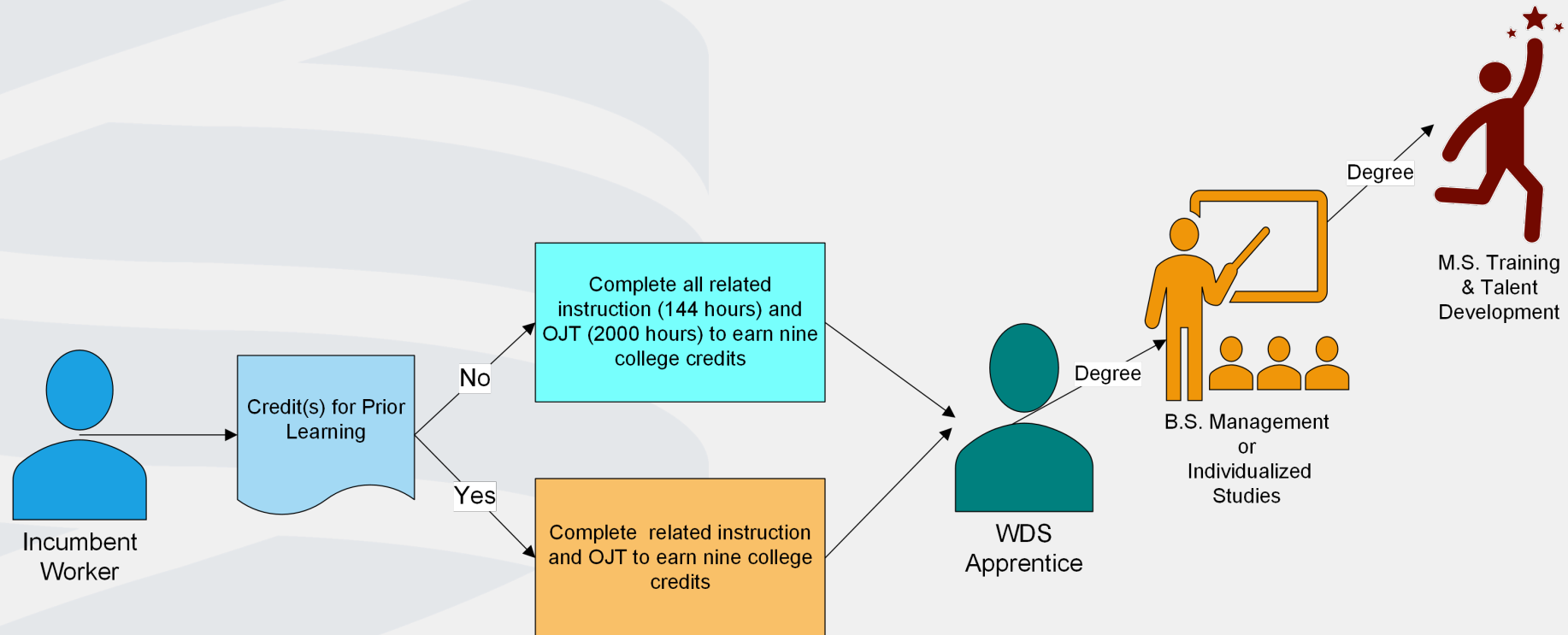
Applied Learning  
& Research.



Business & Industry  
Collaboration.



Career-Focused  
Experiences.





# Questions?

Facilitated by Glendali Rodriguez, Provost  
University of Wisconsin-Stout  
[rodriguezg@uwstout.edu](mailto:rodriguezg@uwstout.edu)

Stout