

NSF ATE panel Pro-Mat Educator Symposium

Presented by

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Mechatronics Education Center

- 2001 – Met with Festo Corporation
- 2002 – Brainstorming meetings -- Columbus, NE / Germany / Hauppauge, NY
- 2003 – Mechatronics Education Center concept
Commissioner of Labor
- 2004 – Festo Corporation
- Nebraska Workforce Development
- Nebraska Department of Economic Development
- Nebraska Department of Education
- Nebraska Community Colleges
- Business and Industry
- Nebraska High Schools
- DEC 2004 – Awarded \$1.64 million grant from US DOL
- Federal Grant: Department of Labor
- Funding period is Dec. 2004 – Dec. 2008

Three Components of the Mechatronics Education Center

1. Short-Term Technical Training
2. AAS degree in Mechatronics/Industrial Technology
3. Professional Development & Outreach



Project SHINE: Shaping High-Quality Integrated Nebraska Education

Awarded **\$870,156** from the NSF
Funding period October 2009 to October 2013

Goal: To engage secondary and college faculty in collaborative relationships with business and industry leading to experiential, problem-based learning, ultimately increasing student participation and success entering high demand technical careers.



Project MwIC Goal:

Awarded **\$893,698** from the NSF

Funding period September/2016 to September 2020

To increase the number of qualified Process Instrumentation and Control technicians to meet current and future workforce demands in Nebraska by developing a new pathway within an existing Mechatronics program and deploying innovative recruiting, outreach, retention, and completion strategies.



Project Mechatronics with Instrumentation and Controls (MwIC)



PROGRAM GOALS:

- Increase the number of skilled technicians in Nebraska
- Develop a state-of-the-art Instrumentation lab and curriculum
- Establish a Business and Industry Leadership Team to guide program
- Create awareness of Instrumentation pathways and careers
- Increase enrollment and retention of mechatronic students
- Create student scholarship opportunities
- Host professional development opportunities for educators



MECHATRONICS
with **Instrumentation**
and **Controls**

