



iMEC
Internet Mechatronics Education Curriculum



NSF ATE Panel Pro-Mat Educator Symposium

Presented by

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Internet Mechatronics Education Curriculum



- Mechatronics at SCC started in 2008 with \$160,000 seed money from area industry.
- 2009 DOL CBJT Grant: Awarded \$1,986,313 in funding, while leveraging \$1,264,913 in resources.
- **STATEMENT OF NEED**
- Industry of Focus: Advanced Manufacturing – The Mechatronics Technology Education Curriculum (MTEC) is a demand-driven solution to regional industry and workforce requests for additional training and educational options in mechatronics (advanced manufacturing).



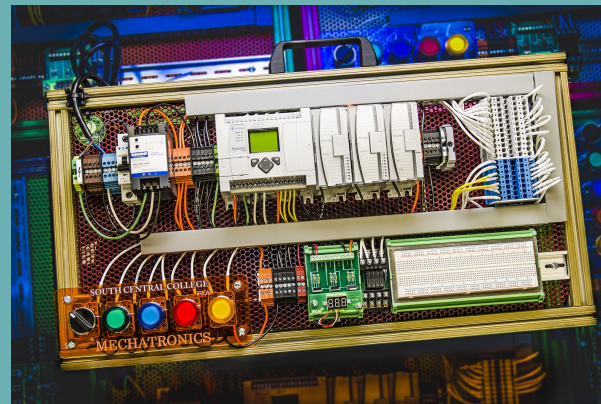
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South Central
College



- 2013 NSF Grant: Awarded \$896,261
- **STATEMENT OF NEED**
- **NSF Project:**
 - iMEC is an distance learning program that gives students the opportunity to access instructors, participate in distance classes and experience the real hands-on training of on-site Mechatronics courses.
 - South Central developed iMEC, a distance learning educational model using online, emulation lab kits and remote access delivery methods that allow institutions to share curriculum and specialized equipment across multiple campuses and also with industry partners.





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• Objectives

- Develop stackable core curriculum for A.A.S. Degree, Diploma, and Certificate
- Adapt core curriculum to an online format
- Adapt core curriculum to a modular format with equal learning outcomes for all students
- Share distant delivery training techniques with schools throughout Southern MN

Activities - Capacity Building

Establish a mechatronics distant lab

Provide professional development for instructors

Reach out to diverse populations (women, minorities, veterans, and geographically dispersed)

Offer experiential career education to youth through camps and industry activities

Establish a communication network with regional school districts and counselors

Work with workforce boards and industry on recruitment tactics