

# 69th

## Four State Regional Technology Conference

Pittsburg State University/Kansas Technology Center

November 10-11, 2011

### TENTATIVE PROGRAM LISTING

[Currently under development]

Theme: "Advancing Technology Through STEM, Innovation and Imagination"

STEM—Science, Technology, Engineering and Mathematics

#### **Kick-Off Event**

Competitive Robotics at Pitt State—The Hardest Fun You'll Ever Have

#### **Technology & Engineering Education**

Tool Time

TECA Regional Competitions--Live

FIRST Robotics in Your Classroom

Colgan High School Entrepreneurship Project

Thematic Learning Showcase in STEM Integration

iPossibilities

Tools, Tips & Tricks for "M&S" in Your "T&E" Class

Bid Your Project to the Students: The HUMVEE Experience

Showcase: Center for Applied Learning—Year 3

Technology & Engineering Teach Tool Box I & II

STEM Robotics—DEPCO

STEM Education Ideas—PITSCO

The Great Gorilla Games Planning Session

STEM Education at Frontenac High School

It's Not sTEM or SteM, It's STEM

#### **General Interest, Tech Management, and Career & Technical Ed**

How Can We Increase and Keep Women Students in STEM?

BV CAPS—Innovative Practices in Preparing Tomorrow's Teachers

FCS—Kuder & Career Exploration

Using Formula-Based Questions

Fab Lab Model (MIT) for Systemic Change

#### **Family and Consumer Sciences**

Family and Consumer Sciences—STEM Applications

Integrating STEM in Pre-School Curriculum . . .

Early Childhood—Using Blocks to Integrate STEM

FCS—Kuder & Career Exploration

Interior Design (ID)--Green Design at Wildcat Glades

Intr. Des. (ID) Paradigm Shift: Residential Energy Audits & Retrofits

Interior Design (ID)—Hay Bale Construction

#### **Manufacturing—Wood-Related . . .**

Incorporating Overlay & Laminates and Veneer in Wood Programs

Low-Cost STEM Applications in Wood Tech

iPad – Integration into AutoCAD and Woods Classes

Solid Lumber Info Session: Selection Considerations, Etc.

MasterCAM Art—Graphics Come to Life in Wood

Extreme Home Makeover: Design & Production of Specialty Projects

SkillsUSA Cabinetmaking Competition—Perspectives for Success

#### **Manufacturing—Metals & Plastics Related**

Showcase: PPG--Industrial Coatings Innovations

Building your Own CNC

Non-Destructive Evaluation (NDE) Basic Processes

STEM Project: Wind Turbine Design, Construction & Testing

Showcase: H. E. Williams—Engineering & Manufacturing Innovative

Lighting Solutions

Free Web-Based Composite Curriculum

STEM: Modeling Thermoformed Solutions to Problems

#### **Mechanical/Design Engineering Tech**

Using SolidWorks to Speed Time to Production

SolidWorks Certifications in the Classroom

Intro to Stress Analysis w/ SolidWorks Simulation

Reflective Practices in the Classroom

Product Data Management and Document Control

#### **Construction**

NCCER 2-Day Workshop (register through AGC)

STEM through Community Service Construction Projects

Extreme Makeover-Joplin: Open Panel Discussion w/ Student Leaders

ID - Hay Bale Construction

Paradigm Shift: Residential Energy Audits & Retrofits

STEM through Building Information Modeling (BIM)

College of Technology STEM Incentive Programs

#### **Electronics-Related**

STEM—Teaching Renewable Energy & Sustainability

Teaching Introductory Electronics-Hands-on Workshop (2 Hr.)

Smith Electric Vehicles—Electric Truck Technology

Tour and Explanation of PSU Electronics Technology Labs

Home Automation & Security: Plug & Play WiFi Solutions

STEM Project: Wind Turbine Design, Construction & Testing

#### **Automotive**

Permatex---Gasket & Sealing Tech Procedures for Auto & Diesel

Smith Electric Vehicles—The Truck of the Future (2 Hr.)

Bosch –Advanced Engine Performance Diagnostic Procedures

SkillsUSA & Ford/AAA Competition Updates

#### **Graphics and Imaging Technologies/Video/Digital Media**

Using Games, Social Media, and Mobile Devices in the Classroom

New Advisor's Perspective: How to Create a Team and Advise on a

Budget--Building More than Just a Class.

Photographic Lighting Using Flash

Tricks of the Trade Using Illustrator

Live Video Streaming BajaSAE-Kansas--Logistics & Production

Emerging Trends in Photography—HDR, 'Painting w/ Light' & More

Integrated Digital Media—3-D Scanning Applications

#### **Safety**

Hazards Encountered During Disaster Response

Adventures in Aging: Challenges for Today's Employer

How to Work Safely Around Overhead Power Lines

**Tours/Open House**—FSCC John Deere Ag Tech; FSCC Harley

Davidson Training Center; PHS "Center of Applied Learning; PSU

Electronics Engineering Technology Labs

**Exhibits**—To be announced, see website. **BOLD** = Confirmed Programs

**70 Programs - Door Prizes - 2 Meals -**

**FMI, Website:**

[www.pittstate.edu/college/technology/fsrtc/](http://www.pittstate.edu/college/technology/fsrtc/)

